13.4.1

ENERGY NORTHWEST

USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
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VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
NOTIFICATIONS

TITLE
EMERGENCY NOTIFICATIONS

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1.0 PURPOSE

This procedure provides instructions for notification of Federal, State and County organizations should a classified emergency provided for in PPM 13.1.1 be declared, upgraded, down graded, terminated, or a Protective Action Recommendation (PAR) be made or modified. It also provides instruction for notification, acknowledgement, and response actions by Energy Northwest emergency response personnel. {R-1586, R-1587, R-1588, R-1589, R1590}

2.0 REFERENCES

2.1 10CFR50.47(b), Emergency Plans {R-1586, R-1587, R-1588, R-1589, R-1590}

2.2 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors {R-1932}

2.3 10CFR26, Fitness for Duty Program

2.4 10CFR50 Appendix E (IV)(C), Activation of Emergency Organization {R-5731}

2.5 NUREG-0654/FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

2.6 NUREG-1022, Rev. 1, Event Reporting Systems

2.7 IEN 98-08, Information Likely to be Requested if an Emergency is Declared

2.8 FSAR, Chapter 13.3, Emergency Plan, Section 4

2.9 SWP-FFD-01, Fitness For Duty

2.10 PPM 13.1.1, Classifying the Emergency

2.11 PPM 13.2.2, Determining Protective Action Recommendations

2.12 PPM 13.5.1, Localized and Protected Area Evacuations

2.13 PPM 13.10.6, Plant/NRC Liaison Duties

2.14 PPM 13.13.4, After Action Reporting

2.15 Classification Notification Form, 968-24075

2.0 REFERENCES (cont'd)

2.16 Emergency Classification or Other Emergency Messages, 968-26045

2.17 Followup Notifications, 968-26098

2.18 Partial Activation or Manpower Schedule Message, 968-26095

3.0 DISCUSSION

Initial notification of Washington State and local authorities must be made within 15 minutes following declaration of the emergency event. For Energy Northwest, local authorities are defined as Benton County, Franklin County and Washington State. DOE-RL should be notified within 15 minutes to allow protective action implementation for DOE workers, although this is not required by regulation. Initial notification of the NRC via the Emergency Notification System (ENS) should be made immediately after notification of the appropriate state and local authorities, and must be made not later than one (1) hour after emergency event declaration. Immediate notifications are outlined in Attachment 6.1, Part A - Immediate Notification List. Notification of other offsite agencies is outlined in Attachment 6.1, Part C - Offsite Agency Notification List. {R-5731}

If a Transitory Event is discovered as outlined in PPM 13.1.1, ENS notification to the NRC must be made within one (1) hour of the discovery of the undeclared (or misclassified) event. State and county authorities will be notified via the Crash phone system within one (1) hour of the event.

Notification of selected non-ERO supervisory staff is intended to prompt them to notify personnel they are responsible for of an emergency declaration so that appropriate protective action may be initiated for individuals in high noise environments or otherwise out of public address range within the owner controlled area.

Emergency notifications are one of the responsibilities assigned to the designated Emergency Director (ED) and will transfer along with the ED function from the Shift Manager to the TSC Manager or EOF Manager. The ED cannot delegate the decision to notify offsite authorities responsible for offsite emergency measures, but may delegate notification actions to other individuals in accordance with this procedure.

4.0 PRECAUTIONS AND LIMITATIONS

4.1 State and local authorities are required to receive emergency event notifications within 15 minutes of event classification, a change in event classification, or changes in Protective Action Recommendations (PARs).

4.2 If after beginning to fill out a Classification Notification Form (CNF), but before the event is communicated to anyone offsite, event conditions change which make it necessary to reclassify the event or change PARs, discontinue completing the first CNF and begin filling out a new one. Mark the discontinued CNF void and include it with the After Action Report per PPM 13.13.4. The initial 15 minute notification requirement is not waived and the new CNF must be completed within 15 minutes of declaring the previous classification.

4.3 If event conditions change which make it necessary to reclassify the event or change PARs and offsite notifications are in progress, the current 15 minute notification requirement is not waived. Notifications in progress for the lower level classification or PARs must be completed. Inform the offsite agencies on the Crash phone that classification or PARs will be upgraded and another notification will be forthcoming shortly.

5.0 PROCEDURE

Form 968-26045, Emergency Classification or Other Emergency Messages, should be used when completing emergency classification notifications and public address announcements.

5.1 Information Requested by NRC

The following information may be requested by the Headquarters Operations Officer:

- Is there any change to the classification of the event?
- What is the ongoing/imminent damage to the facility, including affected equipment and safety features?
- Have toxic or radiological releases occurred or been projected, including changes in the release rate? If so, what are the projected onsite and offsite releases and what is the basis of assessment?
- What are the health effects or consequences to onsite and offsite people? How many onsite or offsite people will be or are affected, and to what extent?
- Is the event under control? When was control established, or what is planned to bring the event under control? What mitigative action is planned or underway?
- What onsite protective measures have been taken or planned?

- What offsite protective actions have been recommended to state or local officials?

- What is the status of state, local or other federal agencies responses, if known?

- If applicable, what is the status of public information activities, such as alarm, broadcast, or press releases by the state, local, or other federal response agency? Has a Joint Information Center been activated?

5.2 Notifications Made By the Shift Manager Acting as Emergency Director (ED)

NOTE: When making a classification change and full Emergency Response Organization (ERO) activation was initiated by a previous classification, it is not necessary to repeat ERO notification.

NOTE: The following steps may be performed out of sequence.

5.2.1 Refer to Attachment 6.2 to assist in determining public evacuation recommendations during inclement weather.

5.2.2 If the need to activate the TSC and OSC exists at the Unusual Event classification, refer to the instructions contained on form 968-26095, Partial Activation or Manpower Schedule Message, to start the autodialer and record an "on-the-fly" message. Use WNP2 as the password. Otherwise, follow the normal notification protocol.

- Notify the SCC that the Control Room will initiate the autodialer scenario. Override step 1 of form 968-26045.

- If an autodialer scenario is already running, cancel the operating scenario.

5.2.3 When emergency classification decisions are made, notify the SCC Duty Officer on the dedicated ring down line or available phone line if the dedicated line is unavailable to initiate the appropriate ERO notification system.

5.2.4 Complete the Classification Notification Form (CNF), Form 968-24075. Refer to PPM 13.2.2 to determine if the event classification also requires Protective Action Recommendations (PARs).

5.2.5 Ensure that plant PA announcements are made using the format of Form 968-26045. Also ensure that the override switch for the public address system is in the "override" position. Return it to the normal position when done.

5.2.6 Transmit the CNF to the SCC and offsite agencies via facsimile. If facsimile failure occurs, go directly to Crash phone notification, Step 5.2.7.

NOTE: If Crash system failure requires that you provide notification by other means, the SCC ringdown line may be used to contact the SCC Duty Officer. The Duty Officer will follow up to ensure notifications are completed. If using an alternate method, you may receive call backs to verify the notification is authentic.

5.2.7 Verify the SCC Duty Officer has received the CNF and is prepared to address the offsite agencies on the Crash phone.

5.2.8 Initiate the Crash phone system by dialing 400. If initiated on the Shift Manager's phone, push the red button labeled "Crash" and dial 400.

5.2.9 Ensure that immediately after notification of the appropriate state and local agencies but not later than one hour after event classification, a designated communicator: {R-1932}

- Provides the NRC with event information using guidance contained in the Event Notification Worksheet (Form 968-25665) via the NRC Emergency Notification System (ENS) by dialing:

  (301) 816-5100, (301) 951-0550 or (301) 415-0553

  If ENS is not available, use any commercial phone and dial:

  9-1-301-816-5100, 9-1-301-951-0550 or 9-1-301-415-0553

- Provides information to the NRC on event classification changes.

- Maintains continuous communication with the NRC for whatever period they request or until relieved by the Plant/NRC Liaison in the TSC.

- When the Plant/NRC Liaison comes on line, provides turnover information via ENS which includes, as a minimum, classification level, reactor status and other relevant plant status items.

- Obtains permission from the NRC ENS communicator prior to transferring ENS responsibilities to the Plant/NRC Liaison.

5.2.10 Direct that the Control Room's facsimile transmittal activity reports be attached to applicable CNFs and that CNFs and NRC Event Notification work sheets be attached to After Action Reports.

5.2.11 Monitor Plant conditions and, if changes in the emergency classification are required, repeat Steps 5.2.1 - 5.2.7.

5.3 Notifications Made By the TSC Manager Acting as Emergency Director (ED)

NOTE: The following steps should be completed in order, however, under certain circumstances such as equipment failure or time constraints, steps may be performed out of sequence.

5.3.1 If a change in event classification or PARs is indicated, confer with the Shift Manager using the Emergency Director ringdown phone as necessary.

5.3.2 Complete the CNF, Form 968-24075. Refer to PPM 13.2.2 to determine needs for additional PARs.

5.3.3 Ensure that Plant PA announcements are made using the format of Form 968-26045.

5.3.4 Direct that the CNF be sent to the offsite agencies via facsimile. If facsimile failure occurs, go directly to Crash phone notification, Step 5.3.5.

NOTE: If Crash system failure requires that you provide notification by other means, the preferred alternate method is the Dial-Up phone system (refer to Emergency Phone Directory, Crash section, for instructions). If using an alternate method, you may receive call backs to verify the notification is authentic.

5.3.5 Initiate the Crash phone system by dialing 400.

5.3.6 Review CNF information with the offsite agencies on the Crash phone, ensure their questions are answered and that they understand the information regarding current conditions.

5.3.7 Direct that facsimile transmittal activity reports be attached to all original CNFs and retained for records.

NOTE: If the Columbia River/Horn Rapids siren alerting system cannot be activated by Benton County Emergency Dispatch Center (EDC) personnel, the EDC may request that Security Communications Center (SCC)

personnel activate the sirens and announce the prescripted messages over the alerting system.

5.4 Notifications Made By the EOF Manager Acting as Emergency Director (ED)

NOTE: The following steps should be completed in order, however, under certain circumstances such as equipment failure or time constraints, steps may be performed out of sequence.

5.4.1 If a change in event classification or PARs is indicated, confer with the TSC Manager and the Shift Manager using the Emergency Director ringdown phone as necessary.

5.4.2 Complete the CNF, Form 968-24075. Refer to PPM 13.2.2 to determine PAR impact.

5.4.3 Coordinate with the TSC Manager to have announcements of plant conditions, hazardous areas to avoid, or security conditions be made to personnel in or near the plant, using the public address system microphone in the TSC.

5.4.4 Direct that the CNF be sent to the offsite agencies via facsimile. If facsimile failure occurs, go directly to Crash phone notification, Step 5.4.5.

NOTE: If Crash system failure requires that you provide notification by other means, the preferred alternate method is the Dial-Up phone system (refer to Emergency Phone Directory, Crash section, for instructions). If using an alternate method, you may receive call backs to verify the notification is authentic.

5.4.5 Initiate the Crash phone system by dialing 400.

5.4.6 Review CNF information with the offsite agencies on the Crash phone, ensure their questions are answered and that they understand the information regarding current conditions.

5.4.7 Direct that the facsimile transmittal activity reports are attached to all original CNFs and retained for records.

NOTE: If the Columbia River/Horn Rapids area Public Alerting system cannot be activated by the Benton County Emergency Dispatch Center (EDC) personnel, the EDC may request SCC personnel to activate the sirens and announce prescripted messages on the alerting system.

5.5 Followup Notifications

5.5.1 About once per hour, or when radiological or plant conditions change, initiate a followup message by Crash phone and fax to offsite agencies. Use form 968-26098, Followup Notifications. Provide updates on applicable information as follows: {R-1587}

a. Name and phone number of caller

b. Location of incident

c. Date and time of incident

d. Emergency classification

e. Type of actual or projected release, estimated duration, and arrival time

f. Estimate of the quantity of radioactive material released or being released, and the point of the release

g. Chemical and physical form of released material including estimates of relative quantities and concentration of noble gases, iodines, and particulates

h. Meteorological conditions or changes

i. Actual or projected dose at the site boundary; projected integrated dose at the site boundary

j. Projected dose and integrated dose at the projected peak and at 2 miles and 10 miles, including affected sectors

k. Estimate of any surface radioactive contamination; in plant, on site or offsite

l. Emergency response actions underway

m. Recommended emergency actions, including PARs

n. Requests for offsite organization support needed onsite

o. Prognosis for worsening or termination of event based on plant information

5.6 Notifications Made By the Security Communications Center (SCC)

5.6.1 If notified of event classification by other than the Crash or alternate dial up phone system, call the Shift Manager back on the dedicated line for verification prior to providing notification to offsite agencies.

5.6.2 Upon receipt of official notification of emergency event classification, implement the SCC Notifications Checklist.

5.6.3 For notifications of event classifications or changes prior to ERO activation, activate the ERO notification system using the automatic dialer. Do not initiate a new scenario if the Control Room has activated the auto-dialer at the Unusual Event classification unles upgrading to an Alert or higher emergency.

5.6.4 For event notifications or changes prior to ERO activation when automatic dialer is not operational, activate the ERO paging system.

5.6.5 Monitor Crash system CNF notifications to offsite agencies, and for notifications from the Shift Manager, follow up with any necessary clarifications or missed data.

5.6.6 Log a record of offsite agency CNF notifications.

5.6.7 Instruct the Central Alarm Station (CAS) Operator to inform the Security Supervisor of the incident, and request a responder to the Security Communications Center to provide notification assistance.

5.6.8 When the responder arrives, give briefing on event notification status, Benton County EDC requests for siren activation or PA announcements, and direct the responder to assist with SCC operations.

5.6.9 For initial or fast breaking classifications where the Offsite Agency Coordinator has not yet arrived at the EOF to take over Part C notifications and make no more than two (2) attempts to contact the listed agencies in the Part C notification list (Attachment 6.1) If requested, provide Items 2-6 on the CNF. Inform the Site Support Manager of those listed agencies you were unable to contact.

5.6.10 Each time the classification is changed, and the Emergency Director function is still in the Control Room, cease the notification sequence and start over from Step 5.5.1. If the ERO Notification system was already activated at the Alert or higher classification, do not reactivate it.

5.6.11 When contacted by the Offsite Agency Coordinator in the EOF, turn over responsibility for Part C Offsite Support Agency Notifications.

5.7 Notifications Made by the Offsite Agency Coordinator

5.7.1 Upon arrival at the EOF, contact the SCC Duty Officer and assume responsibility for making the Attachment 6.1, Part C Notifications.

5.7.2 Make the Part C notifications as required for appropriate event classifications. Provide items 2-6 on the CNF as requested.

5.7.3 Make no fewer than two (2) attempts to contact the agencies/locations listed in Part C. Inform the Site Support Manager of those listed agencies you were unable to contact.

5.8 Emergency Response Data System (ERDS) Operations

NOTE: Activation of ERDS shall occur as soon as possible, but not later than one (1) hour after declaring an Alert or higher emergency classification. {R-1932, R-1936}

NOTE: The responsibility for ERDS activation resides with the Plant/NRC Liaison in the TSC. The on call Emergency Planner and the PDIS Analyst in the EOF may activate ERDS if not already accomplished.

For an Alert or higher classification, activate/ensure ERDS activation per PPM 13.10.6, Attachment 4.1. This should be done from a terminal that can access the Plant Display Information System (PDIS).

5.9 Notification of Transitory Events

NOTE: This notification is the responsibility of the Shift Manager or Emergency Director following discovery of the event.

If a Transitory Event has been discovered per PPM 13.1.1, complete the following notifications:

a. Complete the Transmittal of Information Section of Attachment 6.3, Notification of Transitory Event

b. Obtain approval for release of this information from the Shift Manager or Emergency Director as appropriate.

c. Transmit the notification form to the offsite agencies (state and county) via facsimile.

NOTE: When making the following verbal notifications, fill in the Date, Time and Person Notified in the Notification Documentation Section of the form.

d. Ensure that the following notifications are made within one (1) hour of the discovery of the undeclared (or misclassified) event:

- ENS notification to the NRC, and
- Crash phone notification (by dialing 400) to the offsite authorities.

e. Upon completion of notifications of the event, attach the form to the After Action Report for the event.

6.0 ATTACHMENTS

6.1 Emergency Notification Lists
Part A - Immediate Notification List
Part B - ERO Notification List
Part C - Offsite Support Agency Notification List

6.2 Emergency Response Organization (ERO) Notification and Response Instructions

6.3 Notification of Transitory Event

EMERGENCY NOTIFICATION LISTS
PART A - IMMEDIATE NOTIFICATION LIST

Discussion

- This is a list of State and local authorities that shall be notified within fifteen (15) minutes of all emergency event classifications, changes in classification and Protective Action Recommendations (PARs) as required by 10CFR50.72.

- Notification to these agencies is normally by Crash dedicated phone, but in the event of Crash system failure, the dial-up system should be used for contact. The agencies should be contacted in order of listing when using the dial-up system.

- These offsite agencies are entitled to know ALL information contained on the Classification Notification Form (CNF). A copy of the CNF should be transmitted by facsimile concurrent with phone notification.

Agency Notification List

1. Benton County EOC

2. Franklin County EOC

2. Washington State EOC

3. DOE-RL: Contact the DOE/RL Occurrence Notification Center (ONC).

EMERGENCY NOTIFICATION LISTS
PART B - ERO NOTIFICATION LIST

Discussion

- The Part B notification list represents the essential and augmenting Emergency Response Organization (ERO) positions for Energy Northwest that shall be notified as soon as possible after classification of an emergency event.

- A complete list of ERO work, home, and pager numbers is maintained in selected Emergency Phone Directories for use by the Plant Administrative Manager, Site Support Manager, JIC Support Manager, or SCC Duty Officer. Any of these positions may use the Part B Notification List to contact ERO personnel in the event of an auto-dialer or paging system failure.

- Selected Energy Northwest supervisory staff not on the ERO are also included in this notification list. This assures that Energy Northwest staff and contractor personnel out of public address system range or in high noise environments within the owner controlled area will be notified of an emergency declaration at Columbia Generating Station.

- These positions are normally notified by pager, computerized phone system, or public address system.

EMERGENCY NOTIFICATION LISTS
PART C - OFFSITE SUPPORT AGENCY NOTIFICATION LIST

Discussion

- These offsite agencies are notified as soon as possible after Part A notifications are made. Notification is made at the indicated emergency classification level and at any subsequent reclassification (except as noted below), including termination.

- Notifications are made via commercial phone, radio or facsimile. An Offsite Agency Notification Checklist is located in the Offsite Agency Section of the Emergency Phone Directory.

- These agencies are normally provided information contained in items 2 through 6 of the CNF.

- The agencies are listed in the order of preferred notification. However, Energy Northwest reserves the right to modify the order as required for effective emergency preparedness coordination.

- After two (2) unsuccessful attempts to contact a listed agency, further attempts will be discontinued and an "unable to contact" notice given to the Site Support Manager.

AGENCY NOTIFICATION LIST

At Unusual Event or Above

1. Bonneville Power Administration (BPA)

2. Federal Emergency Management Agency (FEMA)

3. Oregon Office of Energy

At Alert or Above

4. Site One Manager (or Designated Site One Authority (DSA)

5.* Energy Northwest Visitor's Center

6. Security Training Facility

7. Maintenance Training Facility

8. Institute of Nuclear Power Operations (INPO)

9. American Nuclear Insurer (ANI)

At Site Area Emergency or Above

10. Framatome ANP

11. General Electric of San Jose

* Renotification for subsequent classifications not required.

EMERGENCY RESPONSE ORGANIZATION (ERO) NOTIFICATION AND RESPONSE INSTRUCTIONS

General Instructions

If the ERO is summoned during freezing or snowy weather, call the Hanford Patrol Operations Center and request that the roads to the plant be cleared or sanded as necessary. Refer to the Emergency Phone Directory for the number.

If an evacuation is necessary beyond the Exclusion Area, contact the Benton and Franklin County Emergency Operations Centers and request that the Benton and Franklin County road supervisors be contacted to assist in determining evacuation risk. Refer to the Emergency Phone Directory for the number.

At Alert or higher emergency classification, on call and Support personnel are to respond to their assigned emergency centers. Selected ERO personnel may also be instructed to respond at the Unusual Event classification. Security personnel at Energy Northwest roadblocks will direct Plant responders reporting from home to the Health Physics Center (HPC) at the Yakima Building before going to the Plant if there are hazardous conditions to consider. Otherwise, personnel will report directly to their assigned emergency center.

On call ERO members must meet Energy Northwest's Fitness for Duty criteria contained in the General Information Handbook (GIH), GIH 4.6.1. Personnel should not acknowledge a telephone or pager notification unless Fitness for Duty criteria is met.

10CFR26 and Energy Northwest procedures, such as SWP-FFD-01, specify that the consumption of alcohol is prohibited for five hours prior to "any scheduled working tour" and "during the period of any scheduled working tour". Abstinence is not specifically required for other periods. For Emergency Preparedness purposes, a scheduled drill/exercise is considered as a scheduled working tour. Response to an actual event is considered as a call-in situation or unscheduled working tour.

10CFR26 and SWP-FFD-01 address alcohol consumption for call-in/unscheduled working tours. The called-in person(s) must state whether alcohol has been consumed within the preceding 5 hours, and the Supervisor/Manager must ensure this information is provided. For those reporting for a call-in/unscheduled working tour and not meeting the 5 hour abstinence period, a determination of fitness must be made (including any necessary controls or conditions such as supervision or monitoring).

Notification Acknowledgement/Response During Normal Work Hours

While at work, ERO personnel may be notified of emergency classifications by one of the following:

- Pager notification
- Public address (PA) announcements
- Word of Mouth
- Telephone message from an automatic dialer

On call responders report directly to their assigned emergency center following notification of an Alert or higher emergency classification. All ERO personnel designated as Support should report to their assigned emergency center following notification of an Alert or higher emergency classification.

On call ERO members acknowledge all emergency pager notifications by:

- Calling 375-6201. (This is an outside number and should be preceded by 9 if you call from an Energy Northwest internal extension.)
- Following the directions provided.
- If there is no answer at the call in number, respond directly to your emergency center at Alert or higher classifications, and report to the center manager.

If a second notification upgrading the emergency from an Unusual Event to an Alert or higher classification is received, personnel will again need to follow the instructions and acknowledge this notification as well.

Notification Acknowledgement/Response After Normal Work Hours

If you receive an ERO notification on your home phone:

- Follow the scripted directions using a touch tone phone. The auto-dialer cannot recognize a Rotary dial or pulse tone phone.
- If you miss part of the message, call 375-6201.
- If the auto-dialer calls you, it could mean:
    - The on call (pager carrier) ERO member did not acknowledge the pager message
    - An insufficient number of responders for your position have acknowledged
- If a second notification upgrading the emergency from an Unusual Event to an Alert or higher classification is received, personnel will again need to follow the instructions and acknowledge this notification as well.

If you are the on call pager carrier for your ERO position and you receive a pager notification:

- Call 375-6201
- Follow scripted directions using a touch tone phone.
- If there is no answer at the call in number, respond directly to your emergency center at Alert or higher classifications, and report to the center manager.
- If a second notification upgrading the emergency from an Unusual Event to an Alert or higher classification is received, personnel will again need to follow the instructions and acknowledge this notification as well.

NOTIFICATION OF TRANSITORY EVENT

I. TRANSMITTAL OF INFORMATION

A. An event occurred at _____ on _____ which would have
Time Date
required the declaration of a(n):

☐ Unusual Event ☐ Alert ☐ Site Area Emergency ☐ General Emergency

B. This event was exited at _____ on _____ prior to
Time Date
any offsite notifications. Current emergency classification at WNP-2 is:

☐ None ☐ Unusual Event ☐ Alert ☐ Site Area Emergency

C. The event was:

_____

_____

_____ _____

Approval signature for release of this information: ☐Shift Manager ☐Emergency Director

Print Name	Signature	Date	Time

II. NOTIFICATION DOCUMENTATION

NOTE: This notification of Transitory Event is for information purposes only. NO RESPONSE ACTION is required on the part of the individual receiving this notification.

The following notifications were made for the event:

	DATE	TIME	PERSON NOTIFIED
Benton County EOC			
Franklin County EOC			
WA. STATE EOC			
NRC			

Attachment 6.3

13.5.3

ENERGY NORTHWEST		USE CURRENT REVISION
COLUMBIA GENERATING STATION PLANT PROCEDURES MANUAL		
PROCEDURE NUMBER *13.5.3	APPROVED BY JEW - Revision 26	DATE 05/10/02
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION EVACUATION AND ACCOUNTABILITY		
TITLE EVACUATION OF EXCLUSION AREA AND/OR NEARBY FACILITIES		

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1.0 PURPOSE

The purpose of this procedure is to identify the emergency actions and responsibilities of the Emergency Director to cause evacuation of Site One and the Exclusion Area when conditions so dictate.

This procedure also includes guidance for the Security Manager to direct sounding of the Crossroads and Site One sirens at Site Area Emergency to initiate tenant evacuations at Site One.

The procedure also identifies actions to be taken in the event the need for evacuation may impact other facilities in the local area, including the Department of Energy's Fast Flux Test Facility.

2.0 DISCUSSION

2.1 The principle consideration when contemplating an Exclusion Area evacuation is the safety of personnel. An Exclusion Area evacuation is the orderly withdrawal of all personnel, except those required to respond to the emergency situation, from areas outside the Protected Area but within the Exclusion Area boundary, and including those portions of the Owner Controlled Area outside the Exclusion Area. An Exclusion Area evacuation will be announced using any combination of sirens, PA announcements, or telephone notifications

2.2 The Emergency Director is responsible for determining when an Exclusion Area evacuation should be conducted. The decision to evacuate personnel should be based on the course of action which presents the minimum risk to employees. Some examples of conditions which make an Exclusion Area evacuation not advisable include, but are not limited to:

- An ongoing security threat affecting personnel in the Exclusion Area (consult with the Security Manager to aid in determining the safest course of action)
- Inclement weather (e.g., high winds or hazardous road conditions may preclude a safe evacuation of personnel)
- Radiological hazards exist (determine which action would result in lowest dose to evacuating personnel)
- Other hazards exist which might subject evacuees to a higher risk to personnel safety than not evacuating

If conditions for an Exclusion Area evacuation are present, but the decision is made to not evacuate personnel due to safety concerns, personnel will normally remain at their work locations unless directed otherwise.

2.3 Normally, Exclusion Area evacuations will be considered at a Site Area Emergency, or when other conditions warrant and is an automatic action at General Emergency. Exclusion Area evacuees will normally be directed to proceed home.

If a radiological contamination problem is identified, evacuees will be directed to an alternate location for radiological monitoring and decontamination. The Energy Northwest Office Complex (ENOC) is the primary offsite assembly area.

3.0 REFERENCES

3.1 FSAR, Chapter 13.3, Emergency Plan, Sections 4, 5

3.2 PPM 13.2.2, Determining Protective Action Recommendations

3.3 PPM 13.5.5, Personnel Accountability, Search and Rescue

3.4 PPM 13.7.5, Offsite Assembly Area Locations

3.5 Public Address Message Format - Exclusion Area Evacuation, 968-26051

4.0 PROCEDURE

4.1 Emergency Director Responsibilities

4.1.1 Determine the need for an Exclusion Area evacuation at Site Area Emergency. Exclusion Area evacuations are automatic at the General Emergency classification.

4.1.2 Ensure actions for evacuation of Site One are being implemented at Site Area Emergency.

4.1.3 The decision to evacuate personnel should be based on the course of action which presents the minimum risk to employees. Some examples of conditions which make an Exclusion Area evacuation not advisable include, but are not limited to:

- An ongoing security threat (consult with the Security Manager to aid in determining the safest course of action)
- Inclement weather (e.g., high winds or hazardous road conditions may preclude a safe evacuation of personnel)
- Radiological hazards exist (determine which action would result in lowest dose to evacuating personnel)
- Other hazards exist which might subject evacuees to a higher risk to personal safety than not evacuating

If conditions for an Exclusion Area evacuation are present, but the decision is made to retain personnel on site due to safety concerns, personnel will normally remain at their work locations unless directed otherwise.

NOTE: If the EOF Manager is acting as Emergency Director, coordinate the following steps with the Radiological Emergency Manager (REM):

4.1.4 If the decision is made to evacuate the Exclusion Area, determine if radiological hazards exist or are suspected within the Exclusion Area. If a radiological hazard does exist or a radiation release is in progress, then direct evacuees to report to the ENOC assembly area. Determine safe evacuation routes and hazardous areas to avoid.

4.1.5 If evacuation routes are unavailable due to hazards or severe weather, consider sheltering in place until conditions improve.

4.1.6 Use form 968-26051, Public Address Emergency Message Format - Exclusion Area Evacuation to complete a public address announcement.

NOTE: The EOF Manager, if acting as Emergency Director, must coordinate with the TSC Manager to have PA announcements made.

4.1.7 Immediately repeat the announcement. Continue repeating the announcement periodically while the evacuation remains in effect and until the TSC is activated. The TSC will assume responsibility for PA announcements when activated.

4.1.8 Direct the Security Manager (or on-shift Security Supervisor if Security Manager is not yet available) to implement actions for Site One or Exclusion Area evacuation.

4.2 Security Manager/On-shift Security Supervisor Responsibilities for Site One Evacuation - at Site Area Emergency

4.2.1 Confer with the Radiological Emergency Manager or Emergency Director in the REM's absence to determine the appropriate announcement in the following step.

- If a radiation release is in progress, refer to step 4.6.2 to determine the need for an alternate evacuation route.

4.2.2 Initiate a Site One public address announcement by dialing 761 and reading the applicable Message 1 or Message 2:

Message 1 - No Radiological Conditions:

THIS IS AN EMERGENCY ANNOUNCEMENT. SITE ONE PERSONNEL IMMEDIATELY EVACUATE THE HANFORD SITE AND PROCEED HOME.

NOTE: Include alternate evacuation route instructions, if required.

Message 2 - Radiological Conditions Exist:

THIS IS AN EMERGENCY ANNOUNCEMENT. SITE ONE PERSONNEL IMMEDIATELY EVACUATE THE HANFORD SITE AND REPORT TO THE ASSEMBLY AREA AT 3000 GEORGE WASHINGTON WAY."

Repeat the PA announcement.

4.2.3 After step 4.2.3 is complete, direct the SCC Duty Officer to activate the Site One and Crossroads evacuation sirens.

4.2.4 Contact the SCC to verify Site One evacuation actions are being performed.

If the SCC has not been notified, contact the Site One Manager, Designated Site Authority (DSA) or Site One Monitor and verify that the Site One evacuation actions are being initiated.

Contact the SCC for the current DSA phone list, if necessary.

4.2.5 If you cannot contact anyone at Site One and you have not been able to confirm that the Site One gate is locked, make two attempts to contact personnel listed in section one of the Site One contact list.

Direct individuals contacted to evacuate Site One and go home, or report to the assembly area at 3000 George Washington Way.

Direct the Security Supervisor to initiate a sweep of Site One and inform him of any tenant or contractor who was not contacted.

4.2.6 Contact the Security Supervisor to inform security officers at the roadblocks of offsite assembly area location if necessary.

4.3 Security Manager Responsibilities for an Exclusion Area Evacuation

4.3.1 Confer with the Radiological Emergency Manager or Emergency Director in the REM's absence to determine the appropriate announcement in the following step.

- If a radiation release is in progress, refer to step 4.6.2 to determine the need for an alternate evacuation route.

4.3.2 Initiate a Site One public address announcement by dialing 761 and reading the applicable Message 1 or Message 2:

Message 1 - No Radiological Conditions:

THIS IS AN EMERGENCY ANNOUNCEMENT. EXCLUSION AREA AND SITE ONE PERSONNEL IMMEDIATELY EVACUATE THE HANFORD SITE AND PROCEED HOME.

NOTE: Include alternate evacuation route instructions, if required.

Message 2 - Radiological Conditions Exist:

THIS IS AN EMERGENCY ANNOUNCEMENT. EXCLUSION AREA AND SITE ONE PERSONNEL IMMEDIATELY EVACUATE THE HANFORD SITE AND REPORT TO THE ASSEMBLY AREA AT 3000 GEORGE WASHINGTON WAY."

Repeat the PA announcement.

4.3.3 Direct the SCC Duty Officer to activate the Site One and Crossroads sirens.

4.3.4 Contact the SCC to verify Site One evacuation actions are being performed.

If the SCC has not been notified, contact the Site One Manager, Designated Site Authority (DSA) or Site One Monitor and verify that the Site One evacuation actions are being initiated.

Contact the SCC for the current DSA phone list, if necessary.

4.3.5 If you cannot contact anyone at Site One and you have not been able to confirm that the Site One gate is locked, make two attempts to contact personnel listed in section one of the Site One contact list.

Direct individuals contacted to evacuate Site One and go home, or report to the assembly area at 3000 George Washington Way.

Direct the Security Supervisor to initiate a sweep of Site One and inform him of any tenant or contractor who was not contacted.

4.3.6 Contact the Security Supervisor to inform security officers at the roadblocks of offsite assembly area location if necessary.

4.3.7 Direct the Secondary Alarm Station Operator to broadcast the appropriate exclusion area message over the Energy Northwest Maintenance and Security Radio Channels. The SAS checklist announcement should either direct evacuees to (1) report to the ENOC assembly area or (2) proceed home.

4.3.8 If an assembly area is being established, direct the Security Supervisor to dispatch an officer with a radio to the assembly area to maintain order at the designated assembly area, and to relay messages or directions to evacuees.

4.3.9 Provide telephone evacuation notification and the above instructions to the following. Refer to the Emergency Phone Directory for phone numbers.

Circulating Pumphouse
Visitor's Center
Waste Water Treatment Plant
Security Training Facility/Firing Range
Plant Maintenance Training
Ashe Substation

4.3.10 Keep the Emergency Director informed on the status of the Exclusion Area Evacuation.

4.4 Security Supervisor Responsibilities

4.4.1 Direct a Security Officer to the ENOC assembly area, if established, to maintain order at the designated assembly area, and to relay messages or directions to evacuees.

4.4.2 Instruct the Security Officer at the assembly area to communicate on the Security area wide radio channel to help coordinate evacuee processing and relay messages.

4.4.3 Direct the mobile patrol to perform a visual check of evacuation progress within the Exclusion Area Boundary, including the Security Firing Range and that portion of the Owner Controlled Area outside the Exclusion Area boundary. Refer to Attachment 5.1.

4.5 Offsite Agency Coordinator Responsibilities

4.5.1 Contact the FFTF Control Room and inform them of Exclusion Area evacuation PADs made by Energy Northwest.

4.6 Radiological Emergency Manager Responsibilities

4.6.1 Determine if an offsite release is in progress.

4.6.2 If an offsite release is in progress at the time of evacuation, evacuees should be directed to report to the ENOC assembly area. Refer to Attachment 5.2 for site evacuation routes. This direction should include an evacuation route from the list below as appropriate.

- Primary: Route 4 South - This four lane road leads from the sites to

Richland and is the main route from the sites.

- Alternate: Route 10 South - A two lane road (FFTF access road) connects Route 4 with Route 10 to Highway 240, then leads into Richland.
- Alternate: Route 4 South - A two lane road leads northwest from the site, intersecting with Highway 240 and Highway 24 to Yakima.
- Alternate: Route 2 South - A two lane road leading north from the sites, intersecting with Highway 240 and Highway 24 to Yakima.

4.6.3 If no offsite release is in progress at the time of evacuation, evacuees should be directed to report to their homes.

4.6.4 Contact the TSC Radiation Protection Manager (RPM) to coordinate the appropriate evacuation actions.

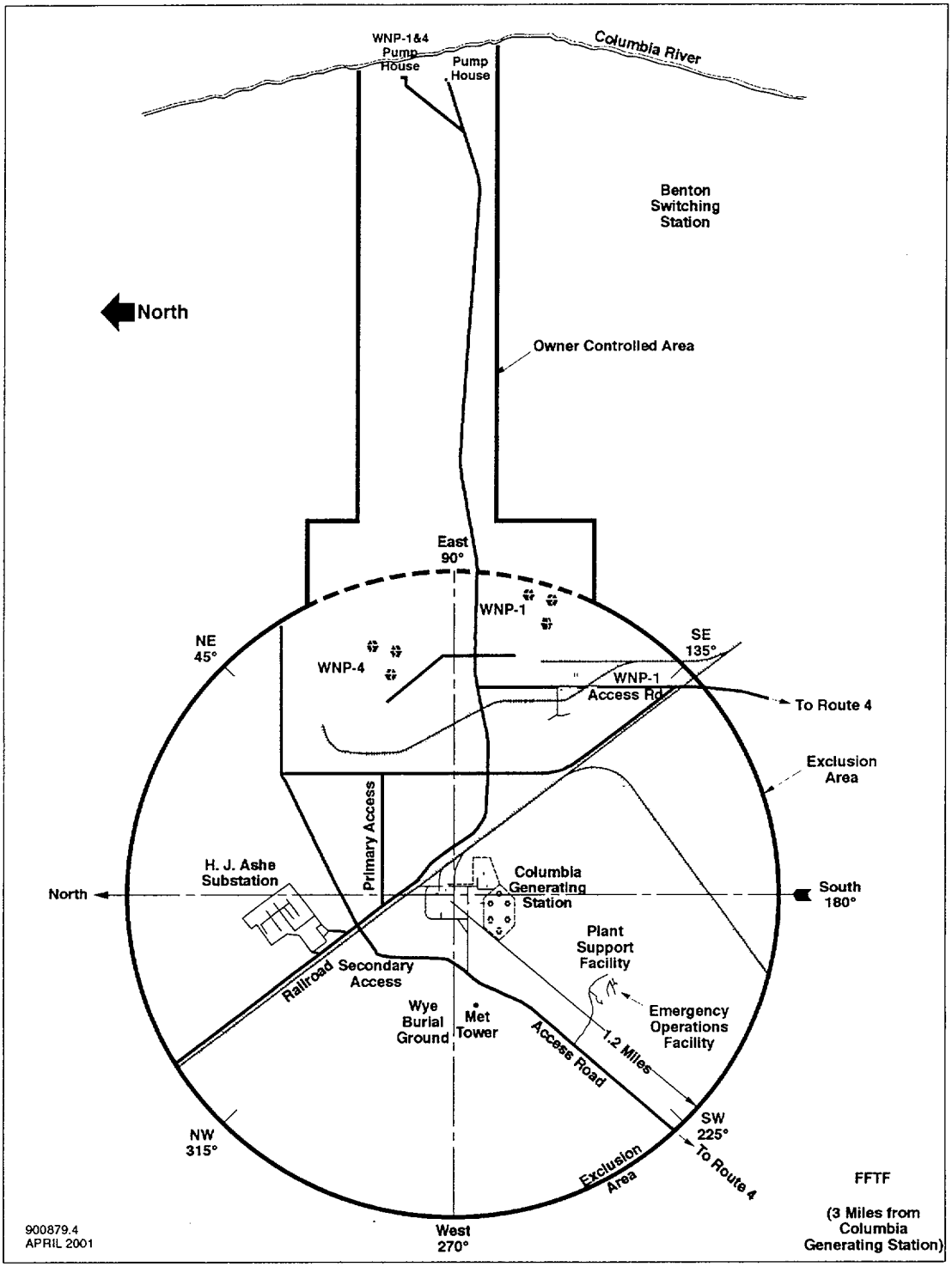
4.6.5 In the event of an Exclusion Area evacuation requiring personnel to report to the ENOC, dispatch an HPC staff member to set up the assembly area. Refer to PPM 13.7.5 for guidance regarding setup and operations of the ENOC assembly area.

5.0 ATTACHMENTS

5.1 Exclusion Area Map

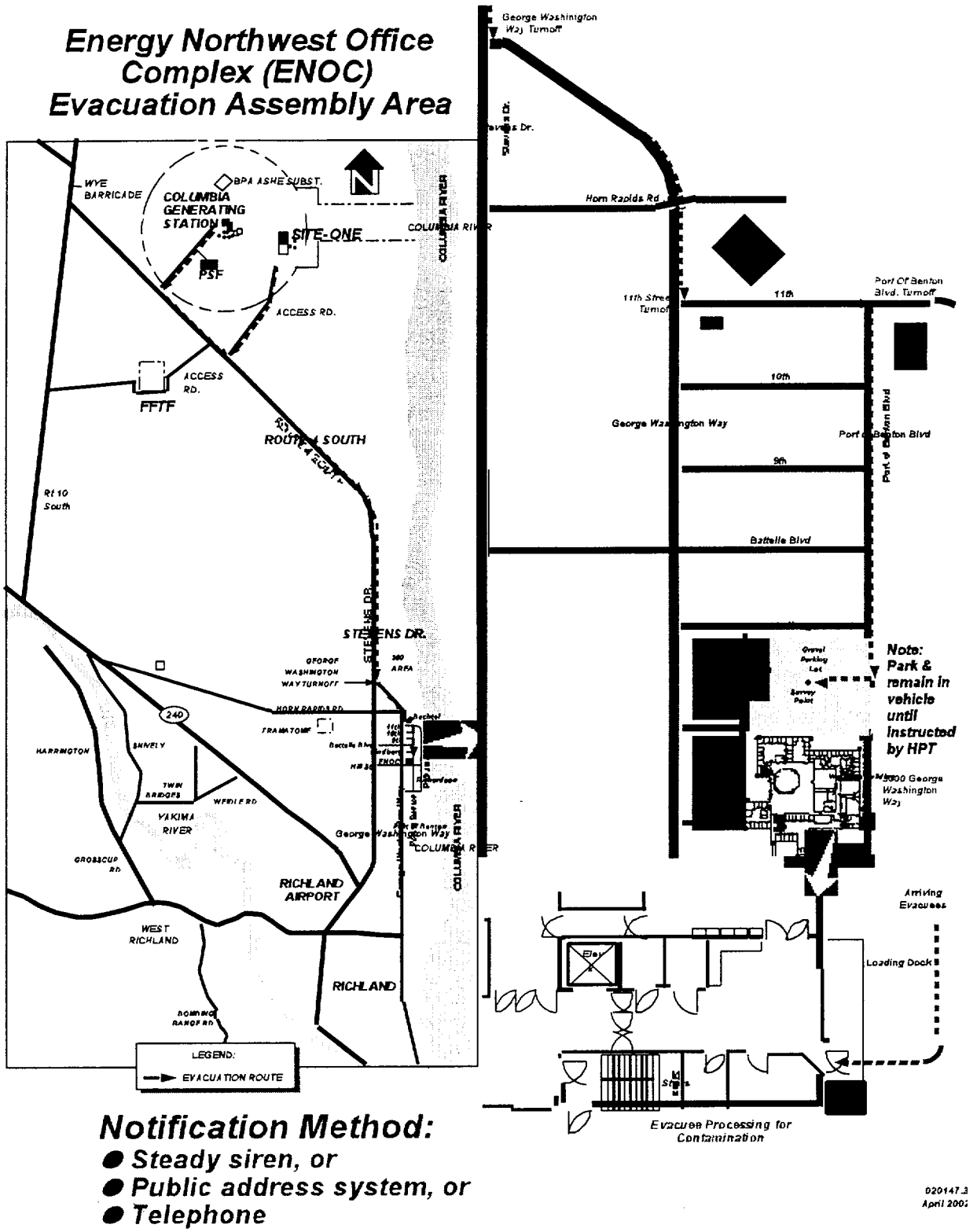
5.2 Evacuation Route Map

EXCLUSION AREA MAP
Includes Owner Controlled Area



Attachment 5.1

EVACUATION ROUTE MAP



Attachment 5.2

13.5.7

ENERGY NORTHWEST

USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.5.7	JEW - Revision 0	05/10/02

VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
EVACUATION AND ACCOUNTABILITY

TITLE
DESIGNATED SITE ONE AUTHORITY DUTIES

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to ensure that Site One occupants are promptly notified of any Columbia Generating Station emergency evacuation requiring implementation of protective actions by Site One occupants.

2.0 REFERENCES

2.1 FSAR, Chapter 13.3, Emergency Plan, Section 5.5.1

2.2 PPM 13.2.2, Determining Protective Action Recommendations

2.3 PPM 13.5.5, Personnel Accountability, Search and Rescue

2.4 PPM 13.7.5, Offsite Assembly Area Locations

2.5 PPM 13.13.4, After Action Reporting

2.6 Public Address Message Format - Exclusion Area Evacuation, 968-26051

2.7 SWI 7.01, Designated Site Authority

3.0 PROCEDURE

Site One consists of the geographical area including WNP-1 and WNP-4 and is fenced in with one normal ingress and egress point at Gate 1-1 on the South side of Site One. In addition this area includes the area accessed from the east side of Columbia Generating Station through the Maintenance Training area gate near Buildings 176, 183, and 184 on Site One.

To assure that Site One occupants are properly notified within the required 15 minutes of any Columbia Generating emergency evacuation requirement, one of three conditions must be satisfied:

- A Designated Site One Authority (DSA) is on site. (A DSA is a Site One Energy Northwest staff member required to be immediately available to respond to Site One or manage an extraordinary condition whether on-site or off-site); or
- A Site One Monitor is stationed at the entrance to Site One and logs personnel entering and leaving the site during non-working hours; or
- The access gate (1-1) to Site One is locked. Any Site One DSA may be on site provided Gate 1-1 is locked and the Security Communications Center (SCC) is notified that they are working onsite. Other Energy Northwest employees may also be on site provided they are escorted by a DSA or specifically approved by the Site One manger or the DSA and the SCC is notified.

3.1 DSA Responsibilities

3.1.1 Remain accessible during the assignment by providing a local telephone number for the initial preferred notification and wearing a pager when on site or not accessible at the local telephone number.

3.1.2 A DSA must be on site and in location to hear the overhead page during site normal working hours. The assigned DSA must notify another DSA, preferably the Alternate DSA, for temporary duty turnover, when leaving the site, entering the buildings without paging systems, or entering the power block buildings, during times when gate is not monitored.

3.1.3 At the end of each normal work day, perform a sweep prior to locking the gate or turning the site over to a Site One Monitor. Any qualified DSA or Site One Monitor may perform sweeps. Sweeps do not require entering the buildings unless there is indication that people are still present, e.g., cars parked nearby, doors open, lights on, noise from building, etc. To verify occupancy a sweep may also be performed prior to turning the site over to a Site One Monitor. Sweep maps are located in Gate 1-1 and at the central ERO Bulletin Board in Building 4.

3.1.4 Ensure that when on duty, the DSA remains available for response to Site One to implement the actions contained in this procedure.

3.1.5 Ensure that the DSA Information Book, maintained by Site One, is readily available when serving as the DSA or Alternate.

3.1.6 Make necessary arrangements with another DSA for coverage if absence is necessary.

3.1.7 Respond promptly to notifications from the SCC.

3.1.8 Respond to emergency events as described in Columbia Generating Station Emergency Plan.

3.1.9 Prior to leaving the site, if an evacuation is necessary, personally perform or coordinate notification (including evacuation route information if required) of tenant, contractor and visitor personnel to assure these individuals are evacuating the site. Refer to Attachment 4.1.

3.1.10 Prior to leaving the site, if an evacuation is necessary, perform personnel sweeps to ensure personnel have evacuated the site. Personnel sweeps do not require entry into buildings unless there is indication of personnel still present, such as cars in the parking lot, doors open, lights on, noise from the building, etc.

3.1.11 Qualified DSAs may access Site One during off-hours provided Gate 1-1 is locked and the Security Communications Center (SCC) is notified that they are working onsite.

3.1.12 Other Energy Northwest employees may also be on site provided they are escorted by a DSA or specifically approved by the Site One Manager or the DSA, and the SCC is notified.

3.1.13 Ensure that site evacuation maps are made available at events where the public will be attending. If evacuation instructions are given to evacuate to the ENOC, ensure that members of the public are given evacuation maps.

3.1.14 When notified of a Columbia Generating Station emergency requiring evacuation of Site One occupants, implement, or delegate implementation of Attachment 4.1.

3.1.15 Upon shift change or termination of the emergency:

a. Prepare an individual After Action Report in accordance with PPM 13.13.4.

3.2 Site One Monitor Responsibilities

3.2.1 The Site One Monitor will be responsible for ensuring notification of Site One occupants promptly of a notice to evacuate Site One. Notification duties will include contacting individuals onsite via phone or direct contact. If required, the Site One Monitor will also provide specific evacuation route instructions to direct evacuees to the Energy Northwest Office Complex offsite monitoring and decontamination facility.

a. Emergency Response Duties

1) Upon notification from the SCC to evacuate Site One and confirming receipt of the notification and confirming evacuation directions by telephone to the SCC, implement the following:

- Activate the Site One sirens if not already remotely activated by the SCC.
- Notify the SCC that the Site One sirens have been activated.
- Initiate the Site Emergency Manager/DSA call tree to contact individuals at their on-site locations. Inform them of the need to immediately evacuate, and provide the evacuation route and destination.
- Place traffic cones in the incoming traffic lane to stop unauthorized traffic from site access.
- Set up evacuation instruction sign at the egress point.

NOTE: Sweeps do not require building entry unless there is indication of personnel present such as cars in the parking lot, doors open, lights on, noise from the building, etc.

- Initiate a sweep of Site One. Check locations known to be occupied first. Ensure all personnel are notified to evacuate and given information regarding routes and destination as applicable.
- After all personnel have evacuated, leave the site.

- Close the egress gate but do not lock it. Leave the site.
- Notify the Security Officer at the roadblock that personnel on Site One have evacuated.
- Inform the Site One Manager, fill out an After Action Report per PPM 13.13.3, and forward to the Supervisor, Emergency Preparedness giving details of any required emergency actions.

b. Normal Duties (Weekends and Off Fridays)

1) Upon assuming the Monitor duties:

- Read the turnover information from a qualified DSA which should include a list and location of expected activities for the weekend and off Friday, as applicable. On weekends the turnover will be in the Site One Monitor log.
- Contact the SCC upon assumption of duties and determine if they have a list of current site occupants.

2) Conduct a phone check with the SCC every four hours or as directed by management.

3) Log in personnel arriving at the site, include names and locations, and log out personnel leaving the site.

4) Perform a sweep at anytime prior to leaving the site. Notify SCC when leaving the site.

5) Maintain a log of all gate and entrance related activities.

c. Normal Workdays, <u>Morning</u>

1) A qualified Site One Monitor is authorized to open the access gate at the beginning of each workday. This Site One Monitor shall perform the Normal Duties as described above and shall remain at the gate logging personnel entering and exiting Site One until a qualified DSA arrives on site

d. Normal Workdays, <u>Evening</u>

1) Shut and lock the gate and perform a sweep while monitoring for activity trying to exit the site. When the site is cleared of personnel, lock the gate and leave. Alternatively, another qualified Site One Monitor, DSA, or Security Officer may monitor or perform a sweep while the other performs the sweep or remains at the gate. Tenants may be asked to call and verify their exit time. If all tenants are offsite earlier than the scheduled

closing time (currently 7:00 PM), then the gate may be locked. Notify the SCC when leaving the site.

4.0 ATTACHMENTS

4.1 Emergency Evacuation Checklist

Emergency Evacuation Checklist

ALL SITE ONE QUALIFIED DSAs

- ☐ **Upon a notification (siren, page, or telephone) any DSA must immediately notify Site One Emergency Manager/Designee (this should be in person if possible)**
- ☐ **First DSA to arrive at the MIC Room takes charge, until relieved by the Site One Emergency Manager**

SITE ONE EMERGENCY MANAGER (or DSA in charge)

- ☐ **If evacuation information was not received by telephone conversation (direction to go home or to the ENOC), confirm receipt of notification to the SCC (8065), obtain necessary instructions and destination information, and then advise all DSAs and gate person.**

- ☐ **Immediately send one person to Gate 1-1 (take Site One phone list). Assure ability to respond to phone calls.**

  This person
  1. Activates siren unless already activated. Notify SCC that sirens activated
  2. Makes Gaitronics announcement.
  3. Places orange traffic cones at incoming gate.
  4. Puts up the applicable evacuation sign for exit.
  5. Monitors who exits the Site and does not allow anyone to enter.
  6. Tells people exiting any further necessary instructions.
  7. Does not leave until relieved by Site One Emergency Manager.

- ☐ **Assign someone to take roll. (Initiate Training Area sweep – requires key)**
- ☐ **Assign someone to make sure the following is completed (account for people)**

  Note: Use the following for notifications: "Columbia Generating Station has declared a Site Area Emergency. Evacuate the site immediately and go *home (or to the ENOC*.) "

  1. Verbally notify Site Support Manager/Craft Lead to notify Site One Craft
  2. Perform Page 761 announcement
  3. Check White Visitor/Sign Out Board
  4. Check Key Log
  5. Check Vehicle Sign Out Board

- ☐ **Assure notification of anyone signed out on the White Board, Vehicle Board, or Key Log by either specific assignment, as part of the sweep, or by telephone.**
- ☐ **Immediately initiate call tree – Prior to making notifications, confirm with the Site One Emergency Manager if personnel are to go home or the ENOC.**
- ☐ Immediately initiate sweeps
  1. Send two to perform sweep of training area – requires key
  2. Send one to perform sweep of East Side area – requires key
  3. Send one to sweep shop area route
  4. Send one to sweep Durametal area and north route
  5. Send one to sweep paint shop area

Sweepers - After completing the sweep, report to Gate 1-1, identify the area you swept, and confirm that notifications/evacuations have been completed (including any problems requiring Security follow-up)

Any unassigned personnel shall be directed to leave immediately. As personnel complete their assignments they shall be directed to leave. Site One Emergency Manager shall relocate to Gate 1-1 as appropriate. Everyone to report to person at Gate 1-1 that they completed their assignment as exiting the site.

The Site One Emergency Manager (or DSA in charge) shall be the last person to exit the site and shall notify the Security Officer at the roadblock south of Gate 1-1 that all personnel on site have evacuated.

NOTE: The off-hours or weekends emergency notification will come from our Site One Monitor & Security, as applicable. The Site One Monitor will notify (phone/page) logged in personnel and perform sweeps, as deemed necessary to assure that all on-site personnel have been notified.

13.7.5

ENERGY NORTHWEST

USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
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EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
PERSONNEL MONITORING, DECONTAMINATION, FIRST AID

TITLE
OFFSITE ASSEMBLY AREA OPERATIONS

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to provide guidance for the setup and operation of the offsite assembly area for evacuee processing, monitoring and, when necessary, decontamination of potentially contaminated personnel and vehicles.

2.0 REFERENCES

2.1 FSAR, Chapter 13.3, Emergency Plan, Section 5.7.3

2.2 SPIP-SEC-04, Officer Responding to PSF Ambulance Bay/Offsite Assembly Area

2.3 PPM Volume 11, Health Physics Procedures

2.4 PPM 13.5.1, Localized and Protected Area Evacuations

2.5 PPM 13.5.3, Evacuation of Exclusion Area and Nearby Facilities

2.6 PPM 13.13.4, After Action Reporting

3.0 DISCUSSION

Personnel evacuated from the Columbia Generating Station Protected Area are normally instructed to assemble at the Kootenai Building, which is intended to be the primary assembly area. When the Kootenai Building is not available, personnel will be directed to the Energy Northwest Office Complex (ENOC), which is the designated alternate assembly area for evacuees from the Columbia Generating Station Protected Area.

Personnel evacuated from the Exclusion Area will be instructed to go home when no radiological hazard exists. When radiological concerns warrant, Exclusion Area evacuees will be instructed to assemble at the ENOC, which is the designated Energy Northwest offsite assembly area for monitoring and, if necessary, decontamination.

During activation of the ENOC as an offsite assembly area, the Security Manager or Security Supervisor is responsible for dispatching a Security Officer for evacuee processing, crowd control, and message relay. The Radiological Emergency Manager (REM) is responsible for dispatching Health Physics Technicians and administrative support to perform personnel and vehicle monitoring, decontamination, and record keeping as appropriate. Administrative assistance may be requested from the ENOC Facility Manager.

4.0 PRECAUTIONS

4.1 The safety of personnel takes precedence over the monitoring of personnel and/or vehicles for contamination control purposes. The monitoring of personnel or vehicles should be terminated (or not implemented) if the monitoring may increase the hazard to personnel.

4.2 Protective clothing, dosimetry, and radiological control requirements will be established by Health Physics based on good radiological work practices.

5.0 PROCEDURE

5.1 Assigned Security Officer Duties

5.1.1 When directed by the Security Manager or the Security Supervisor, report to the ENOC or alternate assembly area to assist with evacuee processing.

5.1.2 Upon arrival at the Offsite Assembly Area request a status briefing from Health Physics.

5.1.3 Begin completing the steps in Attachment 6.5 until the first evacuee arrives.

5.1.4 When the first evacuee arrives, be stationed at the entrance to the gravel parking area, direct evacuees to stay in a line going into the parking area. Vehicles will be lined up down the block and should remain on the extreme right hand side of the road without blocking any intersections. Walk along the line of vehicles ensuring that only evacuated personnel are in waiting.

5.1.5 Ensure evacuees remain in their vehicles until directed by Health Physics to do otherwise.

5.1.6 Maintain traffic control and crowd control. Do not turn away anyone from wanting to be monitored.

5.1.7 Once all vehicles and personnel have been initially monitored and screened, remain in the parking area to ensure security of vehicles and integrity of barriers.

5.1.8 When relieved report to HP for precautionary monitoring prior to departing the area.

5.2 Radiological Emergency Manager (REM) Duties

5.2.1 Assign personnel to the offsite assembly area as follows:

a. HP or other qualified personnel to perform vehicle and personnel monitoring and decontamination.

b. As available, assign administrative support personnel to assist with logging evacuees being processed through the assembly area or other record keeping activities.

5.2.2 Brief the JIC HP Spokesperson on the nature of the emergency situation.

5.2.3 For additional radiological assistance, contact the Site Support Manager to request the Department of Energy (DOE) to dispatch HP Techs to the assembly area to perform vehicle and/or personnel decontamination.

5.2.4 When activating the Offsite Assembly Area, ensure that a qualified individual is tasked with performing as the HP person in charge at the Offsite Assembly Area.

5.3 Person in Charge

NOTE: The person in charge may be a qualified HP Spokesperson or other individual knowledgeable about radiological practices.

Obtain briefing from the REM on the status of the plant, wind direction, type and extent of release, number of evacuees expected, and the potential for additional evacuees.

NOTE: If you have to perform a JIC function that may limit your ability to monitor the radio, request a JIC Security Officer to monitor the radio until you are available again.

5.3.1 Take a radio and orange vest out of cabinet #2.

5.3.2 Begin completing the steps in Attachment 6.5 as your JIC duties permit. Turn the portable radio on and be monitoring the radio at all times.

5.3.3 Ensure that the Health Physics reps. are both located at the gravel parking area to implement the monitoring of evacuating personnel and vehicles.

5.3.4 Periodically contact the REM and keep him/her advised of the status of the operation. Request that additional resources be provided if the monitoring and decon functions are overloaded.

5.3.5 Ensure all monitoring and decon operations are conducted in accordance with standard Health Physics practices.

5.3.6 If decon actions do not achieve desired results, inform the REM.

5.3.7 At shift change fully brief your relief on the status of operations being performed.

5.3.8 Upon completion of monitoring and decon operations, collect all relevant documentation for the REM.

5.4 Parking Area Personnel Duties

5.4.1 Health Physics

Do not exclude non-badged individuals from being monitored.

a. Complete a survey of the vehicle radiator grill area, tires, and windshield.

NOTE: Vehicles found to be contaminated will be parked and will not be decontaminated until the recovery phase of the emergency has been entered.

b. If a vehicle is found contaminated, personnel monitoring is not required, direct the occupants to park their vehicle at the south end of the gravel parking area, remain in their vehicle, and await further instructions from HP. Let them know that depending on the numbers of vehicles to be checked that it could take while before they can be further processed.

c. If the vehicle exterior is not contaminated, complete a gross survey of the individuals in the vehicles. If not contaminated direct them to drive back to George Washington Way via the north drive onto Lindberg Street and to proceed home.

d. If monitoring indicates a person is contaminated, direct them to park their vehicle on the south side of the gravel parking area, remain in their vehicle, and await further instructions from HP. Let them know that depending on the numbers of vehicles to be checked that it could take a while before they can be further processed.

e. Periodically note the background count rate, and if it is greater than 300 counts per minute (cpm) or appears to be increasing, inform the HP person in charge. The monitoring area may have to be relocated to a lower background area.

f. Upon completion of monitoring in the parking area, use the installed posts to place a barrier across the west end of the gravel parking area. Ensure that all controlled area portions of the gravel parking area are defined using yellow barrier tape. Refer to Attachment 6.1 for details.

g. Take the survey instruments and go to the monitoring and decon area and complete action in section 5.5.

5.5 Decon Personnel Duties

5.5.1 Health Physics

a. Upon arrival back in the monitoring and decon area, ensure the area is properly set up. Refer to Attachment 6.3 and 6.5.

b. Periodically note the background count rate, and if it is greater than 300 counts per minute (cpm) or appears to be increasing, inform the Person in Charge.

c. Survey personnel coming into the monitoring area. Persons found free of contamination should be sent to the Richland Room to wait for transportation home.

d. When personnel contamination is found, direct the person to remove any contaminated clothing or personal possessions, and place into a plastic bag. Seal the bag and label with the individual's name and phone number on the outside of the bag.

e. If there is skin contamination, direct the individual into the decon area and complete decontamination.

f. When contamination can no longer be detected, complete a record of decontamination activities on Attachment 6.4.

g. When finished, direct evacuees to the Richland Room until transportation can be arranged.

h. Complete a survey of the decon area and remove any loose surface contamination found prior to bringing the next evacuee into the decon area

i. Once cleared the decontaminated individuals shall wait in the Richland Room for further instructions

j. At shift change fully brief your relief on the status of operations being performed.

k. Upon completion of monitoring and decon operations, collect all relevant documentation for the REM.

6.0 ATTACHMENTS

6.1 Offsite Assembly Evacuation Route and Parking

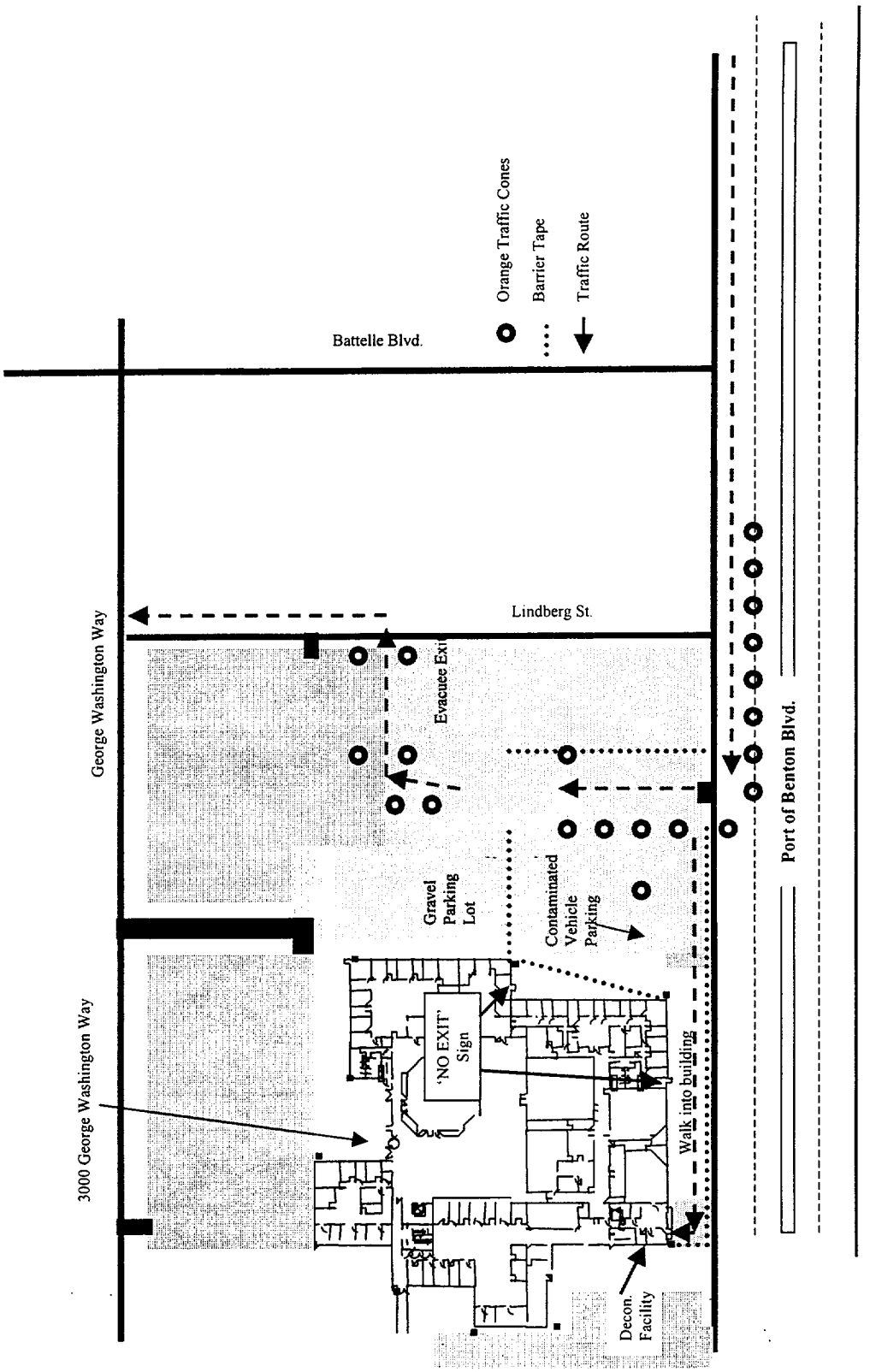
6.2 Offsite Assembly Point Personnel Accountability Log and Vehicle Survey Log

6.3 ENOC Monitoring and Decontamination Facility

6.4 Offsite Assembly Point Personnel Survey Log

6.5 Responder Duties Upon Arrival At the Offsite Assembly Area

OFFSITE ASSEMBLY AREA DRIVE-IN AND PARKING SET-UP



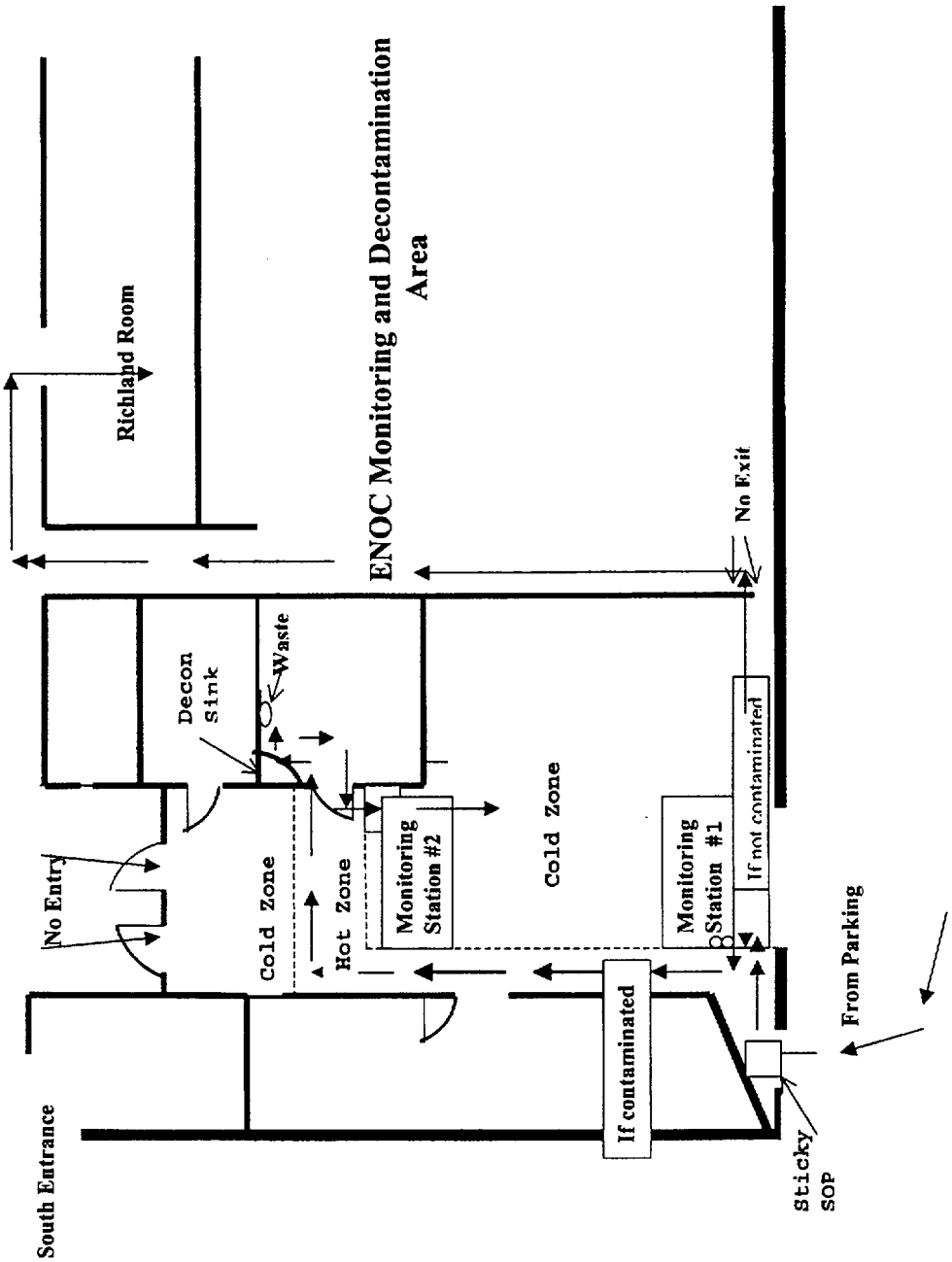
Attachment 6.1

OFFSITE ASSEMBLY AREA
PERSONNEL ACCOUNTABILITY LOG

Name	Organization	Vehicle License #	Phone # at Destination

Attachment 6.2

ENOC MONITORING AND DECONTAMINATION FACILITY



Attachment 6.3

Attachment 6.4

OFFSITE ASSEMBLY AREA
PERSONNEL SURVEY/DECONTAMINATION LOG

Name/Social Security Number	Date/Time	Contamination Level (CPM above bkgd.)	Decon Date & Time	Resurvey Contamination Level	Surveyor Initials

NOTE: After this record is complete and is not required for immediate use, forward to the Health Physics person in charge or to the Radiological Emergency Manager.

RESPONDER DUTIES UPON ARRIVAL AT THE OFFSITE ASSEMBLY AREA

Parking Area Set-up

1. Go to the Alternate EOF storage room and load the cart with all the supplies contained in cabinet #1. The cart should be removed from the storage room prior to being filled.

2. Put on an orange traffic vest and take a portable radio (ensure radios are set to transmit and receive on channel 1) out of the canvas bag, and take the cart to the east entrance of the gravel parking lot.

   NOTE: Reference attachment 6.1 for information on set-up in the road and parking area.

3. Set-out orange traffic cones to mark the entrance into the gravel parking area.

4. Place cones in parking area to define monitoring location.

5. Use caution tape to set-up a boundary using the metal posts from the entrance driveway south to the loading dock driveway, and then to the bottom of the stairs at the ENOC decon/monitoring receiving area entrance.

6. Set-up a monitoring area midway through the gravel parking area (stage remaining equipment).

7. Ensure evacuating vehicles pull into the gravel parking area north of the ENOC. Request one of the evacuees to obtain and log passenger names, vehicle license plate numbers, and destination phone numbers on attachment 6.2. This responsibility can be delegated to any Energy Northwest employee.

8. Traffic cones should be placed approximately every 50 feet from the east entrance to the gravel parking lot drive way to approximately 1000 feet north to identify the traffic lane into the parking area.

Monitoring/Decontamination Area Set-up

1. The supplies for setting-up the monitoring/decontamination room are stored in one of the designated storage cabinets in the monitoring and decontamination area (yellow tie wrapped).

2. Get the key for the facility rooms (Richland Room/Facility's Office) out of the key box located on the wall outside of room 1-2000. The key has a large red tag and is labeled as "loading dock facility key".

3. The step-off pads are stored behind the storage lockers, and the stanchions are located by the outside door.

4. Set-up the room using the diagram on Attachment 6.3.

5. Install the spray nozzle on the faucet in the receiving area janitor's closet sink.

6. Post No entrance, No Exit signs Refer to Attachment 6.1 and 6.3.

13.8.1

ENERGY NORTHWEST

USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.8.1	JEW - Revision 23	05/10/02

VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
OFFSITE DOSE CALCULATIONS

TITLE
EMERGENCY DOSE PROJECTION SYSTEM OPERATIONS

TABLE OF CONTENTS

1.0 PURPOSE

This procedure provides instructions for the use of the computerized Emergency Dose Projection System (EDPS) to predict offsite dose rates, integrated doses and radioactive material deposition for locations within the 10-mile Plume Emergency Planning Zone (EPZ) and the 50-mile Ingestion EPZ. Actual manipulation of system display terminals is described in the Emergency Dose Projection System Users Manual referred to as the Users Manual. {R1594}

2.0 REFERENCES

2.1 Emergency Dose Projection System Users Manual

2.2 FSAR, Chapter 13.3, Emergency Plan, Section 5.3

2.3 NUREG 1228, Source Term Estimation During Incident Response to Severe Nuclear Power Plant Accidents

2.4 10 CFR 50 .47(b) {R1594}

2.5 PPM 13.1.1, Classifying the Emergency

2.6 PPM 13.2.1, Emergency Exposure Levels/Protective Action Guides

2.7 PPM 13.2.2, Determining Protective Action Recommendations

3.0 DEFINITIONS

3.1 Contours - Lines on the output map(s) connecting points of equal dose/dose rate/deposition.

3.2 Delta T - The temperature difference between two sensors located at different elevations on a meteorological tower.

3.3 EDPS (Puff) - A dose projection computer program which employs all the design capabilities of multi-meteorology station data, variable source term, full release time specification and a full output map selection. EDPS will compute dose/dose rate/deposition based on effluent monitor releases or reactor conditions out to 50 miles. EDPS provides the opportunity to modify the source term, reactor power, and release rates. EDPS will accept data from up to 50 meteorology stations to more realistically model the radioactive release via the puff dispersion model.

3.4 EDPS (Plume) - The EDPS Plume model accepts only a constant wind speed, direction and stability class from Columbia Generating Station per release. Additional data are ignored. Otherwise, EDPS (Plume) has similar capabilities as EPDS (Puff) model does.

3.5 Grid Points - EDPS calculations are based on two grid coordinate systems, both centered on the reactor building. For the polar grid, doses are calculated at 10 degree intervals on 6 concentric circles around the reactor. For the Cartesian grid, doses are calculated at 961 uniformly-spaced locations on the model domain (0-10 or 0-50 miles).

3.6 QEDPS - Quick EDPS is a fully defaulted, single entry screen EDPS subprogram designed for quick execution during the early stage of the plume phase and for EAL calculations. Many of the input options are defaulted with text and map output available. QEDPS uses plant monitor data or field team data to calculate offsite doses.

3.7 Release Height - The assumed calculation release height. The effective release height is ground-level which is indicated in EDPS by entering 1 meter (or foot).

3.8 Source Term - The quantity and radionuclide makeup of the material in the release. The source term used in EDPS is based on NUREG-1228.

3.9 Stability Class - Values from A to G representing ranges of Delta T which in turn represent atmospheric mixing estimations. The NRC definitions of these ranges are used to define the stability classes used in EDPS.

3.10 Radioactive Release - Any of the following:

- A valid reading exists which exceeds any PPM 13.1.1 Table 3 Column UE value, OR
- Offsite dose calculations meet or exceed PPM 13.1.1 Table 4 UE levels for TEDE or CDE thyroid, OR
- Field teams measure 100 μR or more at 1.2 miles from the plant.

4.0 PROCEDURE

4.1 General Instructions

4.1.1 If in a declared emergency and an offsite dose or dose rate projection is needed, or if so directed, operate QEDPS or EDPS.

4.1.2 If necessary, boot up the PC at the work station. Log onto the LAN using your user ID and password:

NOTE: The PC assigned to the DOE representative at the JIC may be relocated to the Alternate EOF and used for dose projections. If relocated, it must be connected to the LAN to access PDIS.

4.1.3 Start PDIS by double-clicking on the appropriate PDIS icon on the Windows desktop. Minimize PDIS, and start QEDPS or EDPS.

- When both programs are running, window back and forth for data selection and dose projection input.

4.1.4 Access the Rad Status screen by pulling down the EOP menu from the PDIS menu bar. Select Rad Status to obtain key radiation monitor data, meteorological, and effluent data.

- Other PDIS pulldown menus may be selected to view other plant parameters or trends as desired.

4.1.5 Use either the QEDPS or EDPS based on the following considerations:

a. In the Control Room and TSC, use QEDPS to estimate doses.

b. In the EOF dose assessment area:

1) Use QEDPS to estimate initial offsite doses when plant monitoring data are available.

2) Use QEDPS to estimate offsite doses during quickly changing meteorology or release conditions.

3) When sufficient dose assessment staff are available, then the EDPS may be run along with QEDPS. EDPS results may be lower because of additional parameters supplied when entering EDPS data.

4) Once the release has stabilized or is decreasing, then sole use of EDPS is appropriate with constant meteorological conditions.

5) Use of the EDPS Puff model at the end of the Early (plume) phase, in the Intermediate phase, or with variable meteorological conditions, is appropriate.

4.1.6 Refer to Attachment 5.1 as a guide through EDPS. For more detail consult the EDPS Users Manual.

4.1.7 Real time radiological and meteorological data is used by QEDPS and EPDS by default. Historical dose projections are estimated in Section 4.5.

4.1.8 Review dose projection printouts, note any qualifying factors, as appropriate, initial for release and brief the RPM or REM, as appropriate, on the dose projection.

4.1.9 Refer to PPM 13.2.2 for Protective Action Recommendation (PAR) guidelines.

4.2 Dose Estimation Using QEDPS

4.2.1 Verify that system is operational by turning on the surge protector, CPU, monitor, and printer, if necessary.

4.2.2 Activate QEDPS by double clicking the QEDPS icon.

a. The Monitoring/Field Data screen lists the Plant Monitors and Field Team options used to calculate a release. Readings for all monitors listed are normally available on the Rad Status screen in PDIS for use in the TSC or EOF.

b. Select monitor to be used for the calculations from Columbia Generating Station and enter data in appropriate blocks.

1) If the release path is out the Reactor Building, the primary choice is a Stack Monitor.

2) When a Stack Monitor is selected, a screen will be displayed requesting Standby Gas Treatment System (SGT) information.

- If you receive notification that the Control Room has received a high moisture alarm on Standby Gas Treatment, ensure that dose projections are performed with the SGTS Damaged option checked.

3) The default flow rate will display for the option chosen. Actual values will need to be entered. If two trains of SGT are running, enter the total for both trains.

4) Enter the monitor reading.

5) In the EOF, all suspect data should be verified through EOF engineering staff.

c. Dose Estimation for Unmonitored Release Paths or if Instrumentation is Out of Service or Offscale.

1) Obtain field team data in the form of iodine air sample results or dose rates from the Field Team Coordinator.

2) On the Windows Desktop, select the Excel air sample icon corresponding to the units of the air sample.

3) Enter the cartridge and background readings, and press the tab key to perform the calculation.

4) Select field team data type from the QEDPS menu and enter field team sample results or dose rate values in the popup when prompted.

5) Use closed window readings when calculating dose projections using field team dose rate meter data.

4.2.3 Projected Release Duration

a. If End of Release is <u>not</u> known, a default value of the time of the release rounded up to the next hour plus two hours should be used.

EXAMPLE: Release has lasted for 25 minutes. Round 25 minutes up to 1 hour and add 2 hours to give a release duration of <u>3 hours.</u>

b. Time since Reactor Shutdown

If the reactor is not scrammed, leave the value set to zero.

4.2.4 Enter Meteorology information. Stability class is entered as an alpha character A-G. Meteorological parameters from the primary met tower are normally available on the Radiological Parameters screen. If the primary met tower parameters are not available, use instructions in Attachment 5.1, step 2.2.4.k.3.

4.2.5 Select RUN to calculate doses.

4.2.6 Select PRINT to produce a paper output with emergency worker dose adjustment factor included.

4.2.7 Click on MAP to produce a projected plume map with TEDE and thyroid CDE values. If another dose projection is desired, click on RETURN.

NOTE: When returning from the Centerline Dose Results table, you may archive the results by clicking Yes when prompted. Results are archived in a file called Qarchive found in the subdirectory called Output, which is a part of the subdirectory QEDPS. Results are appended to the existing file and can be viewed with any text editor.

4.2.8 Compare doses and dose rates at 1.2 and 10 miles with EALs (PPM 13.1.1 Table 4) and protective action guidelines (PPM 13.2.1).

4.2.9 To perform another dose calculation, click on RETURN. Previous entries are retained. Enter the new values and select RUN.

4.2.10 Label and sign printed data for distribution. Forward to the REM for approval during the plume phase. In the Control Room the Shift Manager has approval authority. The Washington Senior State Official approves release data for distribution during the ingestion phase. Maintain a binder of all original printouts.

4.2.11 When finished in QEDPS, select QUIT.

4.3 Dose Estimation Using EDPS

4.3.1 Verify that the system is operational by turning on the surge protector, CPU, monitor, and printer, as necessary.

4.3.2 Activate EDPS by double-clicking on the EDPS icon.

4.3.3 Starting at the bottom of the Log On screen, enter your name and click on your location, then exit this screen via the OK button. These actions will identify your model outputs.

4.3.4 An understanding of the following is necessary to successfully execute the programs:

a. At several points in the program when a subprogram begins execution, a black window appears. Press Enter (Return) and, if necessary, click on the X in the upper right to continue.

b. Use the reactor power level default value of 100% unless the reactor has been operating at a different power level for some time. Radioactive decay correction of the source term depends on the interval between Reactor Shutdown Time and Start of Release to Environment, which are entered on the EVENT TIMES screen.

c. Ensure that the plant is the first weather station selected in the meteorology module and that data are entered. The PLUME model requires input from only one set of meteorological data from the plant.

d. If the meteorology data times entered do not occur prior to or the same as the Start of Release to Environment, then you will get zero dose on your map contours window (ZMAX=0).

e. Maps and text output may be made for any 15-minute time interval (display time) in the exposure period.

f. If you get a page fault or any other error message, go back to the main screen and click on FILES then NEXT RUN to restart at the beginning of data input.

4.4 Historical Dose Projections

4.4.1 Contact the PDIS Analyst in the EOF to obtain historical values for the following computer points if the release is from the Reactor Building:

X406, Low Range Stack Monitor, PRM-RE-1A
X407, Intermediate Range Stack Monitor, PRM-RE-1B
X392, High Range Stack Monitor, PRM-RE-1C
F146AV, Delta T
F145AV, Wind direction at 33'
F144AV, Wind speed at 33'

Contact the PDIS Analyst to obtain additional values as necessary:
X198, Turbine Building Exhaust Flow
X409, Turbine Building Low Range Monitor
X394, Turbine Building Intermediate Range Monitor
X366, Radwaste Building Exhaust Flow
X408, Radwaste Building Low Range Monitor
X393, Radwaste Intermediate Range Monitor
X466, SGTS A1
X356, SGTS A2
X452, SGTS B1
X371, SGTS B2

4.4.2 Enter the appropriate values and click RUN, PRINT or MAP as instructed.

5.0 ATTACHMENTS

5.1 EDPS User Guidance

EDPS USER GUIDANCE

1.0 DATA ENTRY OVERVIEW

1.1 The EDPS Main Window provides a snapshot of the flow of data required to generate a dose projection.

1.2 An arrow points toward the module(s) that are available for data entry.

1.3 As information is entered into the various modules, a check mark will display next to the completed module.

1.4 The EDPS system will highlight the normal sequence throughout the program by putting a small box around the current field requiring a response.

1.5 Use of the Tab key is the recommended method for entering numerical data.

1.6 Use of the left mouse button is the recommended method for navigation through the program.

2.0 DATA ENTRY

2.1 Input Source Term Data

2.1.1 At the "Logon as EDPS Master Terminal" screen:

a. Select location for performing a dose projection.

b. Enter your name and select "OK" to continue.

2.1.2 At the EDPS Main Window screen, select "Files" and "Next Run" to reset the program.

2.1.3 Select Scenario Description on the EDPS Main window to begin entering data.

2.1.4 Title/Model/Height/Power

a. Select the Title/Height/Bldg Wake/Power submenu.

b. Type in a Run Title for the dose projection being performed. Example: Run 1

c. Choose the desired Transport Model. In general:

1) For most projections, select the Puff model.

- The Plume model should be selected if the projection is for a near site vicinity map.

2) In the Intermediate (Ingestion) Phase, use the Puff Model

d. Choose Wake Effects or No Wake Effects.

The building wake option should be selected to allow building wake to be accounted for in the rate of diffusion.

e. Enter 1 meter as Effective Release Height.

f. Enter the Reactor Power level at which the plant was operating prior to shutdown. The default value is 100%. If the plant was shutdown for seven days or longer, use 0% for power.

g. When the above data are entered, select the DONE button on the screen.

2.1.5 Source Term

a. Select the Source Term submenu.

b. Select the Source Term option from the display which will be used to perform the projection.

c. When plant monitoring data are available, Monitoring Data is the desired option.

d. If the effluent monitors are out of service, refer to Section 4.0 of this attachment for dose calculations based on plant conditions or sample analysis. QEDPS should also be used to complete the dose projections based on field team results.

e. The Monitoring Data screen lists the Plant Monitors used to calculate a release. Readings for all monitors listed are normally available on the Rad Status screen in PDIS.

f. Select monitor to be used for the calculation and enter data in appropriate blocks.

1) If the release path is out the Reactor Building, the primary choice is a Stack Monitor.

2) When a Stack Monitor is selected, a screen will be displayed requesting Standby Gas Treatment System (SGT) information. This can be obtained through the PDIS Rad Status screen. If the Filter Intact option is selected, the Filter Efficiency is 99.7%. If the Damaged option is selected, EDPS uses 0% efficiency.

   - If you receive notification that the Control Room has received a high moisture alarm on Standby Gas Treatment, ensure that dose projections are performed with the SGTS Damaged option checked.

3) The default flow rate will display for the option chosen, however, this should be obtained from the PDIS Rad Status screen. If two trains are running, add the flow rates together prior to entry.

4) Enter the monitor reading based on the Rad Status screen data.

5) Verify all suspect data through EOF engineering staff.

g. Select the DONE button when complete to return to the data input submenu.

2.1.6 Event Times

a. Select the EVENT TIMES button on the screen.

b. The following events should be displayed:

1) Reactor Shutdown

If the reactor is not scrammed, enter the same time as the Start of Release to Environment. Use a 00:00 time format.

2) Start of Release to Containment

For releases from other than the reactor building, enter the same time as the Start of Release to Environment.

If the reactor is not scrammed, enter the same time as the Start of Release to Environment.

3) Start of Release to Environment

4) End of Release

If End of Release is not known, a default value of the time of the release rounded up to the next hour plus two hours should be used.

EXAMPLE: Release has lasted for 25 minutes. Round 25 minutes up to 1 hour and add 2 hours to give a release duration of 3 hours.

5) End of Exposure

Use the same time as End of Release or a later time. For times later than the End of Release when the plume has left the area of concern, then groundshine is the major pathway of exposure.

6) Select DONE to return to the data input menu.

2.1.7 Review of Entered Data

a. Select the View Entered Values button to review data for accuracy.

b. Select the Return to Main Menu button.

c. If data needs to be changed, then select the appropriate submenu and enter the correct data.

d. When the correct data are entered, select the Store Values in File button.

e. Select EXIT button. A black calculation screen will display. Press Return, and, if necessary, use the mouse to click on the X to close the window.

2.2 Meteorological Data

2.2.1 Select Input Meteorology Data button.

2.2.2 Meteorology Data Overview

Although data from multiple weather stations may be entered in the Puff model, only the data from the Columbia Generating Station meteorology tower is required and used during the Straight Line Plume selection.

The following is a brief description of the functions of each button displayed on the screen:

a.	CHANGE STATIONS	Allows adding or changing stations.
b.	CLEAR LIST	Clears entire list of dates and times.
c.	REMOVE ITEM FROM LIST	After selecting an individual date and time, you can remove it from the list using this function.
d.	ADD NEW DATE/TIME	After entering new date and time in the appropriate fields, this function adds them to the date and time list.
e.	ENTER DATA	Allows entry of data for weather stations for specific dates and times.

2.2.3 Obtain meteorological data. Meteorological parameters from the primary met tower are normally available on the Radiological Parameters screen. If the primary met tower parameters are not available, use instructions provided in step 2.2.4.k.3.

2.2.4 Entry of Meteorological Data.

a. Meteorological data must be entered for times within 3 hours prior to, or at the same time as, the Start of Release to Environment time entered previously. Only one data time is allowed for the straight line Plume model.

b. If desired date and time is not listed, then select CLEAR LIST. Program will ask if you are sure you want to clear the list? Select YES.

c. Enter date of meteorological data in the NEW DATE field (MM/DD/YY). Press TAB key.

d. Enter time in NEW TIME field (HH:MM). Press TAB key.

e. Select the ADD NEW DATE/TIME button.

f. Steps 2.2.3.c. through 2.2.3.e. may be repeated for each date and time to be entered. Multiple dates and times should only be entered if the Puff Model is selected.

g. Select DONE.

h. Select ENTER DATA.

i. Input starts for the first date and time on the list. It may be necessary to select NEXT TIME SHEET to advance to the proper date and time before entering data for the Puff model.

j. Enter Mix Height (in meters). Refer to the list below:

1) winter 500

2) spring 750

3) summer 1000

4) fall 750

k. Enter Stab Class (Stability Class) - list is displayed on screen to choose class by number (1-7). Refer to the table below for the alpha-numeric correlation. If the ΔT or stability class is not available obtain Atmospheric Stability as described in step 2.2.4.k.3).

1) To determine Stability Class: Obtain necessary ΔT from the Rad Status screen, or PN H13-P823 Board L - Met System located in the Control Room via the Information Coordinator. Then use the following table to determine stability class:

Stability Class vs Temperature Change With Height (°F/212 ft)		
Stability Classification	NRC Categories Stability	Temperature Change With Height (°F/212 ft)
Extremely unstable	*A (1)*	$\Delta T \leq -2.2$
Moderately unstable	*B (2)*	$-2.2 < \Delta T \leq -2.0$
Slightly unstable	*C (3)*	$-2.0 < \Delta T \leq -1.7$
Neutral	*D (4)*	$-1.7 < \Delta T \leq -0.6$
Slightly stable	*E (5)*	$-0.6 < \Delta T \leq 1.7$
Moderately stable	*F (6)*	$1.7 < \Delta T \leq 4.7$
Extremely stable	*G (7)*	$4.7 < \Delta T$

2) If the ΔT is not available, use the sigma theta available on the PDIS Rad Status screen.

Stability Class vs. Sigma Theta Signal		
Stability Classification	NRC Categories (Stability)	(Degrees)
Extremely unstable	*A (1)*	sigma theta ≥ 22.5
Moderately unstable	*B (2)*	22.5 ≥ sigma theta > 17.5
Slightly unstable	*C (3)*	17.5 ≥ sigma theta > 12.5
Neutral	*D (4)*	12.5 ≥ sigma theta > 7.5
Slightly stable	*E (5)*	7.5 ≥ sigma theta > 3.8
Moderately stable	*F (6)*	3.8 ≥ sigma theta > 2.1
Extremely stable	*G (7)*	2.1 ≥ sigma theta

3) If meteorology parameters are not available from the plant Met tower, contact one of the following:

- Hanford Internet Site Weather Page (primary alternate):

  Select the Hanford weather icon to access the FFTF meteorological information via the Internet. If the icon is not available, start Internet Explorer and enter the following address:

  http://terraassa.pnl.gov:2080/hms/stamap.htm

  When the icon is selected on the desktop, either a Hanford site map or the data for FFTF will be displayed. If the Hanford site map is displayed, select the 400 Area (option 9) to view the FFTF data.

  Use the wind speed and direction for the 10 meter height since a ground level release is assumed.

  Stability class is expressed as a numeric value. Convert the NRC stability category numeric value for ΔT to an A-G value for QEDPS. Use the NRC numeric value for EDPS. The above table or the aid on Board L may be used.

- PNNL Weather Forecaster (secondary alternate) at 373-2710

Request wind speed, direction, and differential temperature for the FFTF met tower. If this information is not available from the PNNL forecaster, contact the National Weather Service.

- Telephone the National Weather Service Forecaster (tertiary alternate) at one of the following locations:

1-541-276-4493	Pendleton, Oregon
1-206-526-6083	Seattle, Washington

Request the following met data for the Hanford weather station: Wind speed, wind direction, and atmospheric stability, which you will need to convert to a NRC stability category of 1-7. The numeric stability category is the format that ERDS sends to NRC. The National Weather Service does not provide a temperature differential. The NWS will describe the stability category as neutral, moderately stable, etc.

Wind speed obtained from the NWS is in knots. Convert knots to miles per hour using the following conversion:
1 knot = 1.15 statute mile per hour

l. Wind Dir (Wind Direction) - enter direction <u>from</u> which wind is blowing. Data point is normally available on the PDIS Rad Status screen.

m. Wind Spd (Wind Speed) - enter wind speed in miles per hour (mph). Data point is normally available on the PDIS Rad Status screen.

n. Precip (Precipitation) - a list is displayed at left of screen to assist in proper entry. Select the appropriate choice.

o. Select Next Time Sheet button if additional dates and times are available. When data for all stations have been entered, program will display a message stating it is complete.

p. After data has been entered, select DONE.

2.3 <u>Select MODEL DOMAIN button on EDPS Main Window</u>

2.3.1 During the Plume phase, the 0-10 Mile option should be selected. The 0-50 Mile option should only be selected if the released material has exceeded 10 miles, based on actual duration of the release.

2.3.2 Select DONE button.

2.4 Process Meteorological Data

2.4.1 Select PROCESS METEOROLOGICAL DATA button.

2.4.2 A black calculation window will appear behind the menu. Press Return when calculations are complete and close the window by selecting X if necessary.

2.4.3 Press the Enter key to return to the EDPS Main Menu.

2.5 Transport Calculation

2.5.1 Select TRANSPORT CALCULATION. This module calculates the dispersion for each grid point.

2.5.2 A black calculation window will appear behind the menu. Press Return when calculations are complete and close the window by selecting X if necessary.

2.6 Choose CALCULATE DOSES Option

2.6.1 Select Calculate Doses.

2.6.2 For the Plume transport model, use a Display Time value which is equal or prior to End of Release in order to view plume dose rate data. Use of a Display Time after the End of Release will produce dose rates due only to groundshine from deposition.

2.6.3 For the Puff transport model, the Display Time feature allows the puff to be portrayed on the map and in the tabular output at different stages of its progression downwind.

2.6.4 Change Display Time, if desired. After reviewing data, select the OK button.

2.6.5 A black calculation window will appear behind the menu. Press Return when calculations are complete and close the window by selecting X if necessary.

3.0 DATA OUTPUT

3.1 The EDPS Main Menu should now have check marks beside all options except VIEW DOSE MAP and VIEW TABULAR OUTPUT.

3.2 Select VIEW TABULAR OUTPUT to view the dose projection data

3.2.1 Compare dose projection data at 1.2 miles with the EALs (PPM 13.1.1 Table 4).

3.2.2 Compare dose projection data with protective action guidelines (PPM 13.2.2).

3.2.3 Print the dose projection data by selecting File on the menu bar. Then, select Print, and Complete Document.

3.2.4 Program may display a screen concerning Print destination and Port. Select OK.

3.2.5 To exit, select File in menu bar and Exit on the pull down menu.

3.2.6 Dose Assessor and REM signatures are required if the printed output is leaving MUDAC during the plume phase. The Washington Senior State Official approves data for release during the ingestion phase.

3.3 To enter new values and recalculate, select Files/Next Run.

3.4 Select VIEW DOSE MAP button

3.4.1 This module has several options:

a. Files Allows viewing of any map files on the computer.

b. Map Allows selection of the map used for the projection.

c. Dose Allows selection of the type of dose to be mapped.

d. Print Allows map printing.

3.4.2 Choose Map.

a. If the Plume model was selected, use only the following:

1) Vicinity map (Straight Line Plume Model)

2) 10 mile map (Straight Line Plume Model)

b. For the Puff model:

NOTE: Do not select Option 5 or 6 if running the Puff model.

1) Use any of the following map options:

1) 10 mile map (B&W)

2) 10 mile map (color)
3) 50 mile map (B&W)
4) 50 mile map (color)

2) If printing the maps, select the black and white maps ONLY.

3.4.3 Choose Dose to select the type of dose to display and contour values.

a. Contour options:

1) Clear Map Before Plot (This should normally be checked).

2) Recompute Contours (Choose this if manually entering contour levels).

3) Manually Enter Contour Levels (You may specify contour values, however, default values have been entered).

- To print a map showing a projected Plume boundary of 100 micro r, select 1.00 E -04 only.

4) During the ingestion phase, manual contour lines may be entered to project the 500 μR (relocation boundary), 20 μR and 2 μR (food control boundary). To select the correct value, enter the following:

5e-4 for 500 μR
2e-5 for 20 μR
2e-6 for 2 μR

- Select the ground shine projection option when calculating the food control and relocation boundaries.

b. In the Plume phase, choose:

1) Total Effective Dose Equivalent (TEDE) (rem).

2) Acute Thyroid Dose CDE (rem).

c. Map displays with contour lines drawn.

1) The value of each contour line is displayed in the upper left corner of the map.

2) The map may be moved on the screen by clicking on a location on the map with the left mouse button and dragging it. (If map is dragged towards upper left, the contour values will disappear.)

3.4.4 Map Printing

a. For 10 mile maps:

1) Select Print from menu bar.

2) Select Print map from pull down menu.

3) Enter name of person authorizing release. This will normally be the REM during the plume phase. The Washington Senior State Official approves data release during the ingestion phase.

4) Select OK to print map.

5) Computer will display message when printing is complete.

6) Different maps may be drawn and printed by starting at Step 3.4.3 and entering a different selection at 3.4.3.a., and repeating the steps through 3.4.4.b).

7) To EXIT from Map printing:

- Select Files in menu bar.
- Select Exit on pull down menu.

b. 50 mile maps:

1) Select Print from menu bar.

2) Select Print map from pull down menu.

3) Enter name of person authorizing release. This will normally be the REM during the plume phase. The Washington Senior State Official approves data release during the ingestion phase.

4) Select OK to print map.

5) To EXIT from Map printing:

(1) Select Files in menu bar.

(2) Select Exit on pull down menu.

3.4.5 Distribution of Maps and Data

a. Any dose projection maps or data printouts selected for distribution to offsite agencies shall have REM and Emergency Director review and approval.

b. Maps selected for distribution should always be accompanied by the data. This is very important because the plume projected on the map is not closed and without the data sheet, the plume may be misinterpreted.

4.0 OTHER SOURCE TERM OPTIONS

4.1 Dry Well Leakage/Failure

4.1.1 Identify the condition/status for the following parameters and choose the appropriate option:

a. Core Condition

b. Containment Sprays

c. Release Path

d. Dry Well Leak Rate

4.1.2 Select DONE button.

4.2 Wet Well Leakage/Failure

4.2.1 Identify the condition/status for the following parameters and choose the appropriate option:

a. Core Condition

b. Wet Well

c. Release Path

d. Wet Well Leak Rate

4.2.2 Select DONE button.

4.3 Containment Bypass

4.3.1 Identify the condition/status for the following parameters and choose the appropriate option:

a. Core Condition

b. Release Path

c. Leak Rate

4.3.2 Select DONE button.

4.4 Gross Reactor Release - Specified Mix

4.4.1 Base these entries on approved plant sample analyses.

4.4.2 Enter the Gross Release Rate in Ci/sec (or Bq/sec).

4.4.3 Enter the specific percentage of the Release for the listed radionuclides.

4.4.4 Select DONE button when complete.

4.5 Isotopic Release Rates

4.5.1 Base these entries on approved plant sample analyses.

4.5.2 This section allows for entry of the Activity Release Rate (Ci/sec or Bq/sec) for 50 different isotopes.

4.5.3 After entry is complete, select DONE button.

4.6 Return to Section 2.1, Input Source Term Data, of this attachment to continue entering data when an additional dose projection calculation is needed.

13.10.1

ENERGY NORTHWEST		USE CURRENT REVISION
COLUMBIA GENERATING STATION PLANT PROCEDURES MANUAL		
PROCEDURE NUMBER *13.10.1	APPROVED BY JEW - Revision 23	DATE 05/10/02
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION PLANT EMERGENCY FACILITIES		
TITLE CONTROL ROOM OPERATIONS AND SHIFT MANAGER DUTIES		

TABLE OF CONTENTS

1.0 PURPOSE

To describe the responsibilities of the Shift Manager, Control Room Operators, and Shift Technical Advisor, and actions to be taken in the event it becomes necessary to activate and operate the Control Room as an emergency response facility during an emergency.

2.0 REFERENCES

2.1 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors {R-1932}

2.2 10CFR50, Appendix E (IV)(A) {R-5695, R-5708}

2.3 FSAR, Chapter 13.3, Emergency Plan

2.4 Technical Specification 5.1.2 {R1343}

2.5 OER 79071C, Unauthorized Forced Entry into the Protected Area at Three Mile Island Unit 1 on February 7, 1993

2.6 PPM 1.3.1, Operating Policies, Programs, and Practices

2.7 PPM 1.9.14, Onsite Medical Emergencies

2.8 PPM 1.10.1, Notifications and Reportable Events

2.9 PPM ABN-RAD-CR, Control Room HVAC High Radiation

2.10 PPM 5.7.1, Severe Accident Guidelines

2.11 Technical Memorandum 2117, Technical Support Guidelines for Core Thermal Engineer

2.12 PPM 13.1.1, Classifying the Emergency

2.13 PPM 13.10.2, TSC Manager Duties

2.14 PPM 13.2.1, Emergency Exposure Levels/Protective Action Guides

2.15 PPM 13.2.2, Determining Protective Action Recommendations

2.16 PPM 13.4.1, Emergency Notifications

2.17 PPM 13.5.1, Localized and Protected Area Evacuations

2.18 PPM 13.5.3, Evacuation of Exclusion Area and/or Nearby Facilities

2.19 PPM 13.5.5, Personnel Accountability, Search and Rescue

2.20 PPM 13.8.1, Emergency Dose Projection System Operations

2.21 PPM 13.13.4, After Action Reporting

2.22 Classification Notification Form, 968-24075

2.23 Emergency Director Turnover Sheet, 968-25810

2.24 Emergency Response Log, 968-23895

2.25 Emergency Classification or Other Emergency Messages, 968-26045

2.26 Public Address Emergency Message Format - Localized Evacuation, 968-26048

2.27 Public Address Emergency Message Format - Protected Area Evacuation, 968-26050

2.28 Public Address Emergency Message Format - Exclusion Area Evacuation, 968-26051

2.29 Follow-up Notifications, 968-26098

2.30 Partial Activation or Manpower Schedule, 968-26171

3.0 DISCUSSION

3.1 The Emergency Director (ED) is the Energy Northwest individual on site at all times who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions. {R-5708}

3.2 The Columbia Generating Station Shift Manager will normally act as ED when an emergency classification is initially declared. ED responsibilities will transfer from the Shift Manager to the TSC Manager or the EOF Manager depending upon time of facility activation.

3.3 The Shift Manager is responsible for plant operations and during an emergency will be in charge of directing the activities of on shift personnel in taking those actions necessary to mitigate the emergency conditions. The Shift Manager is the ultimate authority in prioritizing and initiating all phases of plant operations. {R-5695}

3.4 The Shift Manager and Security Supervisor are responsible to determine the appropriate course of action to deal with a security contingency that has the potential to threaten emergency response center activation and personnel safety.

3.5 Severe Accident Guidelines (SAGs) are entered and Emergency Operating Procedures (EOPs) are exited when primary containment flooding is required.

3.6 Once emergency operations commence and EPIPs are entered, normal work control practices are superceded by EPIP repair team work task methodology. When the emergency is terminated or recovery operations begin, normal work control practices are reinstated.

4.0 PROCEDURE

4.1 Shift Manager Actions

NOTE: Shift Manager procedural steps may be documented using Attachment 5.1, Shift Manager Checklist.

4.1.1 Diagnose plant conditions and direct necessary actions to alleviate abnormal conditions.

4.1.2 Implement the actions of Section 4.7 until relieved by the responding Emergency Director in accordance with Section 4.6.

a) With assistance from the STA or Emergency Response SRO, determine the necessity to change the emergency classification in accordance with PPM 13.1.1. Make the necessary public address announcements:

CAUTION: At the Unusual Event level when it is desired to activate the TSC and OSC, DO NOT activate the standard auto-dialer scenario for Unusual Event. Record an on-the-fly message to summon TSC and OSC staff using form 968-26171, Partial Activation or Manpower Schedule, instead.

1) Emergency center activation. Refer to Emergency Classification or Other Emergency Messages, 968-26045, (pink form) or,

2) Localized evacuation. Refer to Public Address Emergency Message Format - Localized Evacuation, 968-26048, (blue form) or,

3) Protected Area Evacuation. Refer to Public Address Emergency Message Format - Protected Area Evacuation, 968-26050, (green form) or

4) Exclusion Area Evacuation. Refer to Public Address Emergency Message Format - Exclusion Area Evacuation, 968-26051, (yellow form).

b) Ensure appropriate Control Room log entries are made for the emergency classifications and offsite notification actions.

c) At Site Area Emergency or higher classification, assign an individual in the Control Room to perform center accountability duties per PPM 13.5.5 if manual accountability is necessary.

4.1.3 If it becomes necessary to activate the TSC and OSC at an Unusual Event for additional support, activate both centers.

a) Use form 968-26171, Partial Activation or Manpower Schedule, to record an on-the-fly auto-dialer message to summon OSC and TSC staff at Unusual Event.

4.1.4 For any potential security scenario that could pose a threat to emergency center activation and personnel safety, confer with the Security Supervisor to determine:

- appropriate areas for TSC and OSC operations
- avenues of safe access
- communications abilities
- the ability of Security to keep the area safe
- if it is safe to summon the ERO or activate emergency centers

NOTE: If the SCC is not available to complete offsite notifications, the Control Room must complete offsite notifications until the SCC can resume this responsibility.

4.1.5 If the TSC and OSC are activated, direct the TSC to suspend in-plant activities until further notice.

4.1.6 If security event conditions exist for an emergency classification, declare the appropriate classification and initiate the notification process, but do not summon the ERO or activate emergency centers until it is safe to do so. Confer with the Security Supervisor to make that determination.

4.1.7 If conditions still exist for an emergency classification at the time the security scenario is terminated, initiate the normal notification process. Refer to form 968-26045 (pink form).

4.1.8 If conditions no longer exist for the emergency classification at the time the security event is terminated and it is desired to terminate the emergency classification, do not notify the ERO or activate emergency centers unless other emergency conditions make it necessary.

a) If special instructions are required to the ERO, prepare an "on-the-fly" message notification, using form 968-26171, Partial Activation or Manpower Schedule Message, Use WNP2 as the password.

4.1.9 If a Transitory Event has been discovered per PPM 13.1.1, notify the NRC per the instructions in PPM 13.4.1, section 5.9, Notification of Transitory Events.

4.1.10 If neither the EOF nor the Technical Support Center (TSC) have been activated, and:

a) An effluent release approaching or in excess of PPM 13.1.1 Emergency Action Levels has occurred, or is occurring; or

b) An abnormal release of radioactive effluents is indicated;

Then direct a qualified individual to initiate offsite dose calculations per PPM 13.8.1 and determine if Protective Action Recommendations (PARs) for the public in accordance with PPM 13.2.2, or classifications in accordance with PPM 13.1.1, are required.

4.1.11 If the Technical Support Center (TSC) is activated, transfer responsibilities for peripheral duties not directly related to reactor systems manipulation to the TSC.

4.1.12 Maintain communications with the TSC Operations Manager concerning plant status. Use the Emergency Director ringdown phone when both the TSC and EOF need to be on line to discuss mitigating actions prior to implementation of those actions.

4.1.13 Keep the Operations Manager in the TSC informed of plant conditions and actions which may impact in-plant or offsite activities.

4.1.14 Request the Operations Manager call in additional Control Room support personnel as needed.

4.1.15 If notified of an emergency situation that requires Fire Brigade response, perform the following:

a) Activate the alerting tone.

b) Announce the type of emergency.

c) Give the emergency's location.

d) Request the Fire Brigade respond to the emergency.

e) Repeat the announcement.

f) Establish communications with the Fire Brigade Leader at the scene of the emergency to obtain situational reports, confer on action plans, and assess manpower and equipment needs for mitigating the emergency.

g) Ensure the Control Room maintains accountability for emergency personnel performing Fire Brigade or Emergency Operating Procedure (EOP) activities until the OSC is activated.

NOTE: When not used for Control Room dispatched activities, emergency personnel may be staged in the OSC or at a location determined by the Shift Manager and the OSC Manager.

NOTE: When activated, the OSC becomes responsible for accountability of plant emergency workers.

4.1.16 Inform the OSC of:

- Known or suspected Plant hazards
- Names of dispatched Fire Brigade or EOP team members
- Assignment
- Location
- Time dispatched and expected time of return

NOTE: Tasks of an immediate nature should be prefaced by the term "urgent". The Shift Manager will usually confer with the Operations Manager on tasks of an urgent nature, but the Shift Manager has the final authority in determining if a task is "urgent".

4.1.17 If a task is identified as requiring an immediate response, designate it as "urgent" and communicate the task to the TSC Operations Manager or TSC Manager.

4.1.18 If more than one "urgent" task is identified, select a priority for each and inform the TSC Operations Manager.

4.1.19 If notified of the need for offsite medical assistance for injured or contaminated injured personnel, implement PPM 1.9.14.

4.1.20 Refer any incoming media calls to the Joint Information Center.

4.1.21 Maintain a log of events and actions.

4.1.22 For termination of emergency:

a) Collect the individual After Action Reports prepared by staff personnel.

b) Prepare an individual After Action Report as per PPM 13.13.4.

c) Deliver all After Action Reports to the Operations Manager.

4.2 Control Room Supervisor Actions

4.2.1 Advise the Shift Manager of abnormal conditions and perform duties as directed.

4.2.2 Take actions to terminate the conditions causing the emergency.

4.2.3 Continuously monitor the Control Room habitability in accordance with PPM ABN-RAD-CR.

NOTE: If you initiate PPM ABN-RAD-CR while the TSC is occupied, notify the TSC Manager that an air stagnation condition will exist.

4.2.4 If the TSC is determined to be uninhabitable, initiate TSC isolation actions specified in PPM ABN-RAD-CR.

4.2.5 In the absence of the Shift Manager or higher authority, assume Shift Manager responsibilities, including Emergency Director responsibilities and authority as per Section 4.7. {R1343}

4.2.6 Direct the activities of Control Room Operators and Equipment Operators.

4.2.7 Refer any incoming media calls to the Joint Information Center.

4.3 Control Room Operator Actions

4.3.1 Recognize unusual plant conditions and take necessary actions under direction of Control Room Supervisor and/or Shift manager to terminate the condition causing the emergency.

4.3.2 Keep the Control Room Supervisor informed of unusual conditions.

4.3.3 Refer any incoming media calls to the Joint Information Center.

4.4 Shift Technical Advisor/Emergency Response SRO Actions

- The Shift Technical Advisor (STA) qualified individual should stay abreast of plant activities and status. The STA qualified individual evaluates the risk associated with planned plant activities and advises shift management on actions to be taken to minimize the associated risk. When appropriate, the STA qualified individual should advise shift management on technical matters.

An STA qualified individual shall be on shift in modes 1, 2, or 3, per FSAR requirements, and will be available within 60 minutes for call in, in modes 4 and 5.

When the STA qualified individual is performing a dual role as the Shift Manager or Control Room Supervisor, another SRO (the Emergency Response SRO) shall be on shift to provide independent oversight of plant activities and status, and to assist the Shift Manager in emergency response activities. This individual may be the Shift Support Supervisor (SSS), if SRO qualified.

- The Emergency Response SRO shall be on shift in all modes when the STA function is provided by the Shift Manager or Control Room Supervisor. The Emergency Response SRO is another SRO present to advise and assist the Shift Manager on emergency response actions such as emergency classifications and notifications, protective action recommendations, and off-site dose assessment.

4.4.1 If an off-normal condition is indicated, or if directed by the Shift Manager, man the duty station in the control room and maintain a log of your actions.

4.4.2 Assist the Shift Manager in evaluating plant conditions relative to preestablished emergency action levels and initiating conditions and in declaring the appropriate emergency classification. Refer to PPM 13.1.1.

4.4.3 Utilize the computer outputs (such as, TDAS, PDIS and GDS) to evaluate the potential for core damage or worsening of an abnormal event.

4.4.4 If core damage is suspected, make a qualitative assessment of plant parameters using Technical Memorandum 2117, Technical Support Guidelines for Core Thermal or Reactor Engineer during and following an abnormal event if the TSC is not activated. Provide the Shift Manager with a Plant Status Assessment.

4.4.5 Provide the Shift Manager with recommendations to minimize or control the consequences of an emergency condition.

NOTE: A radioactive release is in progress when any of the following conditions exist:

- A valid reading exists which exceeds PPM 13.1.1 Table 3 Column UE, OR
- Offsite dose calculations meet or exceed PPM 13.1.1 Table 4 Column UE levels for TEDE or CDE thyroid, OR
- Field teams measure GE 100 microR at 1.2 miles.

NOTE: Refer to PPM 13.8.1 for dose projection guidance.

4.4.6 Perform offsite dose assessment using the Quick Emergency Dose Projection System (QEDPS).

4.4.7 Provide input to the Emergency Director for emergency classification and/or protective action decisions as necessary in accordance with PPM 13.2.2 guidance.

4.4.8 Coordinate turn over of offsite dose projection functions to the TSC or EOF when they are activated and able to assume procedural responsibility.

4.4.9 Provide information to the Shift Manager on Emergency Plan Implementing Procedures that prescribe emergency response actions that provide for employee and public safety.

4.4.10 Continuously reassess plant conditions and keep the Shift Manager informed of new data and your recommendations.

4.4.11 Refer incoming media calls to the Joint Information Center.

4.5 All Control Room Personnel

4.5.1 Upon shift change, brief your relief on responsibilities, duties and current status of tasks being performed.

4.5.2 Upon shift change or termination of the emergency:

a) Prepare individual After Action Report as per PPM 13.13.4.

b) Deliver all After Action Reports to Shift Manager for delivery to the Operations Manager.

4.6 Transfer Of Emergency Director Duties

NOTE: The Shift Manager remains a part of the decision making team when in SAGs. Announce the transition of SAG entry and EOP exit to the Control Room and TSC Operations Manager.

4.6.1 Transferring the Emergency Director duties:

a) When contacted by an oncoming Emergency Director, give a time when conditions would permit the turnover process.

NOTE: The Classification Notification Form or the Emergency Director Turnover Sheet can be used as a guide during the turnover process.

b) At the time when conditions permit, contact the oncoming Emergency Director and conduct a turnover that includes a discussion of the Plant status and emergency conditions.

c) Once the oncoming Emergency Director fully understands the current conditions and proposed actions, transfer the Emergency Director duties.

d) Announce the transfer to the facility staff.

e) Log the transfer in the Control Room log.

4.7 Actions As Emergency Director

Once EPIPs have been entered (emergency classification occurs), recovery actions not specifically authorized by plant procedures which have a potential for radioactive release to the environment require Emergency Director concurrence.

4.7.1 Assume the following responsibilities, delegating tasks as needed with the exception of items a., through d., which may not be delegated to any other member of the Emergency Response Organization:

a) Classification of emergencies in accordance with PPM 13.1.1, and periodically review the classification to ensure that it reflects current plant conditions.

b) Making protective action recommendations in accordance with PPM 13.2.2, to offsite authorities responsible for implementing emergency measures for the public.

c) Approving official notifications/communications (i.e., Crash calls) to local, state, and Federal agencies.

1) Ensure that immediately after notification of the appropriate state and local agencies, but not later than one hour after event classification, a designated communicator: {R1932}

a) Provides the NRC with event information using guidance contained in the Event Notification Worksheet. (Form 968-25665) via the NRC Emergency Notification System (ENS), or by dialing:

(301) 816-5100 or (301) 951-0550; and

b) Maintains continuous communication with the NRC for whatever period they request or until relieved by the Plant/NRC Liaison position in the TSC.

d) Requesting assistance from offsite organizations and agencies as needed.

e) Ensuring, through the facility managers, that the appropriate emergency procedures are implemented.

f) Ensuring the requisite emergency response facilities are activated and properly staffed.

g) If advised of a personnel injury or death, then:

1) Ensure that transportation to a medical facility is being arranged and next-of-kin notifications occur using guidance found in PPM 1.9.14.

2) Ensure details of the incident, e.g., individuals name, type of injury, duties when injury occurred, etc., are forwarded to the Joint Information Center.

h) Authorizing venting of the primary containment when in SAGs.

NOTE: The Shift Manager, as Emergency Director, may terminate an Unusual Event. Due to the commitment of onsite and offsite manpower and resources, only the EOF Manager as the Emergency Director may terminate an event classified as Alert or greater.

i) Terminating the emergency and entering the recovery phase in accordance with PPM 13.13.2, Emergency Event Termination And Recovery Operations.

4.7.2 If action is determined to be necessary that causes the plant to depart from Technical Specifications or license conditions, refer to PPM 1.3.1 and 1.10.1 to invoke 10CFR 50.54(x) actions.

4.7.3 Approximately every 30 minutes, or when conditions change, perform the following:

a) Review the emergency action levels (EALs) in procedure PPM 13.1.1 to ensure the emergency classification declared reflects current Plant conditions.

b) Review the protective action recommendations (PARs) in procedure PPM 13.2.2 to ensure the PARs declared reflect current Plant or radiological release conditions.

c) Review the status of onsite protective actions and whether actions should be modified based on the current Plant conditions.

d) Conduct facility briefing.

4.7.4 When conditions warrant a change in emergency classification or protective action recommendations, then perform the following:

a) Complete a Classification Notification Form (CNF).

NOTE: Notifications to the state, counties and DOE (Hanford) are required within 15 minutes of time noted on the Classification Notification Form.

b) Ensure initial and follow-up notifications are performed in accordance with PPM 13.4.1, using the completed CNF as the basis. Refer to 968-26098, Follow-up Notifications, for follow-up notifications.

c) Direct the Information Coordinator to inform the other Columbia Generating Station emergency facilities of the change in emergency classification and/or protective actions and to ensure a copy of the CNF is sent to the appropriate organizations.

4.7.5 Determine if Protected Area evacuation actions need to be taken in accordance with the following:

a) Alert - Evacuation is optional, depending on event prognosis, consider evacuating plant personnel who are not part of the ERO.

b) Site Area Emergency and General Emergency - Protected Area evacuation is required for most situations per PPM 13.5.1 for personnel who are not part of the ERO.

4.7.6 Ensure the SCC Duty Officer has implemented actions to evacuate Site One personnel at Site Area Emergency per 13.5.3.

4.7.7 Consider exclusion area evacuation in accordance with PPM 13.5.3 when a Site Area Emergency is declared and order an exclusion area evacuation when a General Emergency is declared.

4.7.8 Authorize personnel to take potassium iodide (KI) when recommended by the Radiation Protection Manager or Radiological Emergency Manager in accordance with PPM 13.2.1.

5.0 ATTACHMENTS

5.1 Shift Manager Checklist

SHIFT MANAGER CHECKLIST

Response Actions	Time Completed	Initials
Shift Manager Actions		
1. Diagnose plant conditions and direct necessary actions to alleviate abnormal conditions.	_____	_____
2. Implement actions of Section 4.1 or 4.7 until relieved by the responding ED per Section 4.6.	_____	_____
3. If it becomes necessary to activate the TSC and OSC for additional support, activate both centers.	_____	_____
4. For security contingencies, confer with the Security Supervisor to determine appropriate areas for TSC/OSC operations, safe routes, communications ability, and if it is safe to summon the ERO or activate the emergency centers.	_____	_____
5. If EOF nor the TSC have activated and an abnormal release of radioactive effluents is indicated, direct a qualified individual to initiate offsite dose calculations and determine if PARs per PPM 13.2.2 or classification per PPM 13.1.1 are required.	_____	_____
6. If TSC or EOF is activated, transfer responsibilities not directly related to reactor manipulation to the TSC.	_____	_____
7. Keep Operations Manager in TSC informed of plant conditions which may impact in plant or offsite activities.	_____	_____
8. Maintain communications with the TSC Operations Manager concerning plant status. Use the Emergency Director ringdown phone as appropriate to discuss mitigating actions prior to implementation of those actions.	_____	_____
9. Request Operations Manager call in additional CR support personnel as needed.	_____	_____

Response Actions	Time Completed	Initials
10. If notified of emergency situation that requires FB response, perform the following: a. Activate the alerting tone. b. Announce the type of emergency. c. Give the emergency's location. d. Request the FB respond to the emergency. e. Repeat the announcemnet. f. Ensure Control Room maintains accountability for personnel performing FB or EOP activities until the OSC is activated. g. Establish communications with FB Leader at scene to obtain situational reports, confer on action plans, and assess manpower and equipment needs.	_____	_____
11. When activated, inform OSC of known or suspected Plant hazards, and names of dispatched FB or EOP teams, assignment, location, time dispatched and expected time to return.	_____	_____
12. It task requires immediate response, designate it as "urgent" and communicate to TSC Operations Manager or TSC Manager.	_____	_____
13. If more than one "urgent" task is identified, select a priority for each and inform the TSC Operations Manager.	_____	_____
14. If notified of need for offsite medical assistance, implement PPM 1.9.14.	_____	_____
15. Refer any incoming media calls to the JIC.	_____	_____
16. Maintain log of events and actions.	_____	_____
17. For termination of emergency, collect After Action Reports (AAR) from staff, prepare an individual AAR per PPM 13.13.4, and deliver AARs to Operations Manager.	_____	_____

Transfer Of Emergency Director Duties

The Shift Manager remains a part of the decision making team when in SAGs. Announce the transition of SAG entry and EOP exit to the Control Room and TSC Operations Manager.

1. If transferring the ED duties:

   a. When contacted by an oncoming ED, give a time when conditions would permit the turnover process. _____ _____

   b. At the time when conditions permit, contact oncoming ED and conduct a turnover using the Classification Notification Form or the Emergency Director Turnover Sheet as a guide. _____ _____

   c. Once the oncoming ED fully understands current conditions and proposed actions, transfer ED duties. _____ _____

   d. Announce the transfer to the facility staff. _____ _____

   e. Log the transfer in the facility log. _____ _____

Actions As Emergency Director

Once EPIPs have been entered (emergency classification occurs), recovery actions not specifically authorized by plant procedures which have a potential for radioactive release to the environment require Emergency Director concurrence.

1. Assume the following responsibilities, delegating as necessary with the exception of items a., through d., which are nondelegable: _____ _____

   a. Classification of emergencies per PPM 13.1.1 and periodically review the classification to ensure that it reflects current plant conditions.

   b. Making protective action recommendations per PPM 13.2.2 to offsite authorities responsible for implementing emergency measures for the public.

   c. Approving official notifications/communications to local, state, and Federal agencies.

   d. Requesting assistance from offsite organizations and agencies as needed.

f. If advised of a personnel injury or death, then:

Ensure that transportation to a medical facility is being arranged and next-of-kin notifications occur using guidance found in PPM 1.9.14.

Ensure details of the incident, e.g., individuals name, type of injury, duties when injury occurred, etc., are forwarded to the Joint Information Center.

g. Authorizing venting of the primary containment when in SAGs.

h. Terminating the emergency and entering the recovery phase per PPM 13.13.2.

Response Actions	Time Completed	Initials
2. Refer to PPM 1.3.1 to invoke 10CFR 50.54(x) actions as necessary.	_____	_____
3. Approximately every 30 minutes, or when conditions change, perform the following:	_____	_____
a. Review the EALs in procedure PPM 13.1.1 to ensure the emergency classification declared reflects current Plant conditions.		
b. Review the PARs in procedure PPM 13.2.2 to ensure the PARs declared reflect current Plant or radiological release conditions.		
c. Review the status of onsite protective actions and whether actions should be modified based on the current Plant conditions.		
4. When conditions warrant a change in emergency classification or protective action recommendations, perform the following:	_____	_____
a. Complete a Classification Notification Form (CNF).		
b. Ensure notifications are performed per PPM 13.4.1 using the completed CNF as a basis.		

c. Direct the Information Coordinator to inform the other Columbia Generating Station emergency facilities of the change in emergency classification and/or protective actions and ensure a copy of the CNF is sent to the appropriate organizations.

5. Determine if Protected Area evacuation actions need to be taken. Protected Area evacuations are required for most situations at Site Area Emergency per PPM 13.5.1. _____ _____

6. Direct the SCC Duty Officer to implement evacuation actions for Site One personnel at Site Area Emergency per 13.5.3. _____ _____

7. Consider exclusion area evacuation per PPM 13.5.3 when a Site Area Emergency is declared and order an exclusion area evacuation when a General Emergency is declared. _____ _____

8. Authorize increases to emergency worker radiation exposure limits when recommended by the Radiation Protection Manager or Radiological Emergency Manager per PPM 13.2.1. _____ _____

9. Authorize personnel to take potassium iodide (KI) when recommended by the Radiation Protection Manager or Radiological Emergency Manager per PPM 13.2.1. _____ _____

13.11.7

ENERGY NORTHWEST

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.11.7	JEW - Revision 24	05/10/02

VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
EMERGENCY OPERATIONS FACILITY

TITLE
RADIOLOGICAL EMERGENCY MANAGER DUTIES

TABLE OF CONTENTS

1.0 PURPOSE

This procedure describes the emergency responsibilities and duties of the Emergency Operations Facility (EOF) Radiological Emergency Manager (REM), including oversight of: Environmental Field Team activities; dose projection activities; Protective Action Recommendation (PAR) coordination with the Emergency Director; coordinating any offsite monitoring and decontamination activities; Health Physics Center (HPC) activities; and coordination of offsite reentry and Ingestion Pathway activities with Washington State Department of Health (WADOH) personnel. As necessary, portions of the REM duties may be delegated to staff members.

Upon arrival of WADOH representatives and/or the U.S. Department of Energy, Richland Field Office (DOE/RL) representatives, certain REM duties will be administered according to the jurisdictional authority of each agency, with the REM ensuring full cooperation and support to all agencies.

2.0 REFERENCES

2.1 FSAR, Chapter 13.3, Emergency Plan, Sections 2 and 6

2.2 PPM 1.9.14, Onsite Medical Emergencies

2.3 PPM 13.2.1, Emergency Exposure Levels/Protective Actions Guides (PAGs)

2.4 PPM 13.2.2, Determining Protective Action Recommendations

2.5 PPM 13.5.1, Localized and Protected Area Evacuations

2.6 PPM 13.5.3, Evacuation of Exclusion Area and/or Nearby Facilities

2.7 PPM 13.7.5, Offsite Assembly Area Operations

2.8 PPM 13.8.1, Emergency Dose Projection System Operations

2.9 PER 201-2601, Honeywell Control Systems {P183283}

REFERENCES, (cont'd)

2.10 PPM 13.9.1, Environmental Field Monitoring Operations

2.11 PPM 13.9.5, Environmental Sample Collection

2.12 PPM 13.9.8, River Evacuation Monitoring

2.13 PPM 13.13.3, Intermediate Phase MUDAC Operations

2.14 PPM 13.13.4, After Action Reporting

2.15 Emergency Response Log, 968-23895

2.16 Ten Mile EPZ Field Team Summary Map, 968-25130

3.0 PROCEDURE

3.1 When notified of an Alert, Site Area Emergency or General Emergency, or if directed, report to the EOF and sign in on the EOF staffing board.

3.2 Obtain your procedure book from the wall rack and supply drawer from the EOF supply cabinet.

3.3 Notify the Site Support Manager and EOF Manager (or the TSC Manager if EOF Manager not yet present) of your availability.

NOTE: MUDAC may be declared operational with only four field team members, however, emergency center activation requirements are not met.

3.4 Inform the EOF Manager when MUDAC is operational (dose assessment and field monitoring functions).

NOTE: At an Alert or higher emergency, a Security Officer will be dispatched to the EOF HPC to lock down the Kootenai Building and assist with EOF access control, and with evacuation assembly area accountability.

3.5 At Alert or higher, determine the current wind direction. If the wind is blowing from between 20 and 90 degrees, direct activation of the ENOC Offsite Assembly Area.

3.6 If activating the ENOC Offsite Assembly Area, contact the RPM and request three HP Technicians. Dispatch two Technicians to the ENOC to begin setting up the Offsite Assembly Area per PPM 13.7.5. Direct the third Technician to the EOF to initiate habitability monitoring.

3.7 At Alert of higher, if the wind is from any direction other than between 20 and 90 degrees, contact the RPM and request that two HP Technicians be dispatched to the EOF for HPC activation.

- Direct the HPC staff to set up HPC facilities and establish EOF habitability monitoring. Refer to Attachment 4.10.
- Ensure appropriate radiological monitoring equipment (dose rate and air sampling) is positioned in the lower level south end Kootenai Building near the EOF and periodic dose rate and airborne surveys are performed as necessary.

3.8 Establish and maintain contact with the RPM in the TSC for a briefing on the status of the emergency, and to provide assistance in radiological assessment, mitigation activities, or dose assessments.

3.9 When dose assessment is fully functional, assume responsibility for offsite dose projections from the RPM in the TSC, or the STA in the Control Room.

3.10 Provide an initial briefing on the emergency using Attachment 4.8 to the offsite agency representatives.

3.11 In the event of a Protected Area evacuation, assist the RPM with coordinating Health Physics (HP) monitoring and decontamination services at the evacuation assembly area.

- Refer to PPM 13.5.1 for Protected Area evacuation routes.
- Refer to PPM 13.7.5 for Alternate Assembly Area set up instructions.

3.12 When radiological conditions require evacuation of the Columbia River, indicating the potential for contaminated boaters, or if requested, provide for radiological monitoring of Columbia River evacuees per PPM 13.9.8.

3.13 If plant conditions indicate the possibility of an offsite release or a Site Area Emergency is declared, direct the Site Support Manager to call in an additional REM to assist in REM responsibilities.

3.14 If the determination is made to evacuate the Exclusion Area, determine if radiological hazards exist or are suspected. Determine evacuation routes and hazardous routes to avoid. Refer to PPM 13.5.3.

3.15 In the event of an Exclusion Area evacuation requiring personnel to report to Energy Northwest Office Complex (ENOC), ensure that the TSC is directed to complete the appropriate PA announcement.

3.16 In the event of a Protected Area evacuation or Exclusion Area evacuation requiring personnel to report to the ENOC, notify the HP Technicians at the Offsite Assembly Area that evacuees have been directed to report to the ENOC.

3.17 If conditions indicate the need for road closure, evacuation, or other protective measures, coordinate the safe placement of Energy Northwest or local law enforcement agency roadblocks with the Security Manager.

NOTE: Security no longer maintains dosimetry in road block kits, and will direct personnel needing dosimetry to the EOF, except for fire and ambulance personnel who will obtain dosimetry at the vehicle trap.

3.18 When notified that personnel must pass through road blocks into radiological hazard areas, determine and implement necessary radiological monitoring and protective clothing requirements.

NOTE: The Energy Northwest administrative exposure hold point (2 rem TEDE) is automatically waived for Energy Northwest emergency workers at Alert or higher emergency classifications and increased to 5 rem TEDE.

NOTE: A radioactive release is in progress when any of the following conditions exist:

- Valid reading exists which exceeds PPM 13.1.1 Table 3 Column UE, OR
- Offsite dose calculations meet or exceeds PPM 13.1.1 Table 4 Column UE levels for TEDE or CDE thyroid, OR
- Field teams measure GE 100 μRem/hr at 1.2 miles.

3.19 If a confirmed radioactive release is in progress, the following steps should be taken:

- Determine the advisability of sheltering or evacuating any manned Exclusion Area facility, i.e., Kootenai Building, Laundry, Energy Northwest, Ashe Substation, River Pumphouse, and determine and direct implementation of radiological protective actions for EOF personnel, based on radiological conditions.

- Refer to PPM 13.2.2, Section 4.3, Offsite PARs Based on Projected Doses, to determine offsite PARs and act as the Protective Action Decision Group spokesperson in proposing PARs to the EOF Manager (Emergency Director).

- Provide the Emergency Director with updated dose projection results. Information provided should include dose, dose rate, and the basis for the time used for the dose estimates.

- Notify the Emergency Director and the State and County Technical Liaisons if dose rates exceed 250 mRem/hr thyroid, or air sample results exceed 1.4E-7 μCi/cc Iodine 131. Ensure that this information is marked on the CNF.

- Consult with the Field Team Coordinator to ensure the following:

  a. Dispatch field teams to traverse at designated distances (i.e., 1.2, 5, and 10 miles) and verify dose rate levels above 100 μRem/hr.

  b. Upon identification of a radioactive plume, commence air sampling activities.

  c. Identify plume centerline and boundaries (i.e., 100 μRem/hr).

3.20 Determine the need for a dose adjustment factor based on dose projection results or reports from field team members indicating a potential inhalation concern. The dose adjustment factor provides an internal component which should be multiplied by the dosimeter reading to give an estimate of total exposure.

- Using QEDPS, calculate a dose adjustment factor:

  a. If the dose adjustment factor is 5 or greater, a dose adjustment factor of 5 should be implemented.

b. Provide the dose adjustment factor to the Field Team Coordinator for use in establishing field team exposure limits.

NOTE: Refer to PPM 13.2.1 for guidance on recommending administration of Potassium Iodide (KI) for emergency workers. Be aware that criteria for recommending KI for State, County and DOE personnel are different from those for Energy Northwest personnel.

- EOF Manager (as Emergency Director) authorization is required for issuance of KI.

3.21 Advise the Field Team Coordinator when protective actions need to be taken by field teams, such as KI.

3.22 Review Field Team summary and dose projection summary maps for the plume EPZ, and when applicable, the ingestion EPZ. Have copies transmitted to the JIC, County and State emergency centers.

3.23 Continually assess offsite radiological releases and determine the need to recommend to the Emergency Director to provide authorization to exceed Protective Action Guides (PAGs) for offsite emergency workers, in accordance with PPM 13.2.1, or general public Protective Action Recommendations (PARs) in accordance with PPM 13.2.2.

3.24 Brief all Energy Northwest and offsite MUDAC personnel of impending PAR declarations prior to issuing the PAR.

3.25 As necessary, complete radiological release-related portions of the CNF for PAR modifications.

3.26 Provide PAR updates to the EOF Information Coordinator for transmittal on the Information Coordinator's network.

3.27 Conduct periodic briefing sessions of the MUDAC staff on pertinent information from incoming hard copy communications and changes in emergency status.

3.28 Act as a conduit for information flow between MUDAC, HPC personnel, and the main EOF area, and provide input into EOF briefings on status and activities of dose assessment, field monitoring activities, EOF habitability, etc., per Attachment 4.8.

- If you receive notification that the Control Room has received a high moisture alarm on Standby Gas Treatment, ensure that dose projections are performed with the SGTS Damaged option checked.

3.29 Distribute MUDAC generated hard copy dose projection information (map and data sheets) to State and County Emergency Operations Centers (EOCs), and retain a copy for MUDAC records.

3.30 When relief from the Health Physics Network (HPN) is requested by the RPM, select a communicator and direct that they maintain the EOF HPN line in accordance with Attachment 4.4. Consider calling in an additional Dose Projection Health Physicist to fill this position.

3.31 If the following conditions exist:

- EOF general area radiation levels exceed 5 mrem/hr as indicated by the EOF radiation monitor, or;
- EOF unidentified airborne radioactivity exceeds 0.3 DAC (0.3 DAC equates to approximately 750 ccpm on a 40 ft^3 air sample in the field), then:

  a. Immediately notify the EOF Manager and staff of the condition;

  b. Direct surveillance of airborne activity be increased to once per hour and results reported to you;

  c. Direct dose rates in the area be determined approximately every 15 minutes and results reported to you;

  d. Direct that projected accumulated doses for the EOF personnel be evaluated and appropriate stay times be established;

  e. Prohibit eating or drinking in the EOF until advised of resolution of the EOF airborne activity problem.

3.32 If the EOF is activated and ventilation system problems are experienced, notify the Construction and Maintenance Services on-duty supervisor at x6063 to put the EOF HVAC system into the EOF recirculation mode (mode 3) and skip Step 3.33.
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3.33 Dispatch a Health Physics Technician to the Kootenai Building penthouse to determine if the following conditions exist if the plume is over the Kootenai Building:

- Kootenai Building intake air activity exceeds 100 mRem/hr, or;
- Kootenai Building return air activity exceeds 50 mRem/hr, then:

  a. Immediately notify EOF Manager and staff of the condition.

  b. Ensure EOF ventilation system is in proper operating mode per Attachment 4.10;

c. Request the Site Support Manager to notify Facilities to assist, if needed.

3.34 If necessary, direct the Site Support Manager to contact the Chemistry/Effluent Manager for support of field team sample analysis.

3.35 As required, direct appropriate staff to perform the following tasks per Attachment 4.5:

- Prepare, issue and collect direct reading dosimeters and TLDs for emergency response personnel.
- Contact Nuclear and Engineering Support Staff training to determine if respirator training, medical qualifications, and fit testing for emergency support personnel, vendors, and contractors who must enter areas requiring respiratory protection is current.

3.36 If questioned by State or County officials, provide briefings that explain EOF radiological survey data and dose projection activities that determined Energy Northwest recommendations for protective actions.

- If Washington State Radcon teams are not available, and establishment of an offsite survey or remote decontamination location is required to handle potentially contaminated personnel, make arrangements for the necessary personnel and equipment.

3.37 If injured or contaminated personnel require offsite medical attention, refer to PPM 1.9.14.

3.38 If additional Energy Northwest personnel resources are needed for Environmental Field Teams, dose assessment or other EOF radiological duties, request the Site Support Manager obtain those resources.

3.39 Assist the Site Support Manager as necessary to establish second shift personnel for dose assessment area staff, environmental field teams and HPC staff.

3.40 If offsite radiological resources are needed, inform the EOF Manager.

3.41 Determine disposition of Environmental Field Team samples gathered pursuant to PPM 13.9.5:

- In consultation with representatives of DOH for samples outside the Hanford Reservation.
- In consultation with representatives of DOE-RL for samples on the Hanford Reservation.

3.42 Upon notification of transfer of plant Post Accident Sample System (PASS) samples, brief HPC Staff on anticipated radiation levels and necessary protective measures.

3.43 Ensure that the Field Teams identify the trailing edge of the radioactive plume to confirm that the release has ended (i.e., LT 100 μRem/hr).

3.44 When emergency activities have resulted in stabilizing the plant, and radiological conditions are progressing from the early phase to the intermediate phase, refer to Attachment 4.11 to transfer MUDAC leadership to the Washington State Department of Health (WADOH) Representative, and:

- Implementing PPM 13.13.3, Intermediate Phase MUDAC Operations.
- Arranging additional support with the Site Support Manger to fulfill all responsibilities of MUDAC during this phase.

3.45 Estimate the total population exposure as a result of the radiological release. Consider total dose from EDPS, duration, and length of exposure. Refer to Attachment 4.9.

3.46 Coordinate use of Energy Northwest radiological equipment and manpower resources, authorized by the EOF Manager, to provide assistance to the state in establishing relocation centers, food control zones, or other reentry and recovery activities.

3.47 Refer all calls from media to the JIC.

3.48 Upon shift change, turn over chronological logs and brief your relief on the current status of the emergency, radiological activities, and status of work being performed.

3.49 Upon shift change or termination of the emergency:

- Prepare an individual After Action Report. Refer to PPM 13.13.4
- Collect individual After Action Reports prepared by staff personnel.
- Deliver all After Action Reports and accompanying sheets to the EOF Manager.

4.0 ATTACHMENTS

4.1 Checklist for Radiological Emergency Manager Duties

4.2 Dose Projection Health Physicist Duties

4.3 Comparison of Field Data with Dose Projections

4.4 Health Physics Network (HPN) Communicator Duties

4.5 Health Physics Center (HPC) Staff

4.6 Health Physics Center Staff Radiological Sample Tracking Instructions

4.7 Typical Setup for HP Center Receiving Area

4.8 Radiological Emergency Manager Briefing Guidelines

4.9 Total Population Within the 10 Mile EPZ

4.10 EOF HVAC Automatic and Manual Operation

4.11 Dose Assessment Center Leadership Transfer Guide

CHECKLIST FOR RADIOLOGICAL EMERGENCY MANAGER DUTIES

A. Report to the EOF, sign in on the staffing board, obtain your procedure book and supply drawer.

B. Notify the EOF Manager (or the TSC Manager if EOF Manager not yet present) of your availability.

NOTE: MUDAC may be declared operational with only four field team members, however, emergency center activation requirements are not met.

C. Inform the EOF Manager when MUDAC is operational.

D. At Alert or higher, contact the RPM and request two HP Technicians be dispatched to the EOF for Health Physics Center (HPC) activation.

.1 Direct the HPC staff to set up HPC facilities and establish EOF habitability monitoring. Refer to Attachment 4.10.

.2 Ensure appropriate radiological monitoring equipment is positioned (dose rate and air sampling) in the lower level south end Kootenai Building near the EOF and periodic dose rate and airborne surveys are performed as necessary.

E. Establish and maintain contact with the RPM for a briefing on the status of the emergency, and to provide assistance in radiological assessment, mitigation activities, or dose assessment.

F. When dose assessment is fully functional, assume responsibility for offsite dose projections from the TSC or Control Room.

G. In the event of a Protected Area evacuation, assist the RPM with coordinating HP monitoring and decontamination services at the evacuation assembly area.

- Refer to PPM 13.5.1 for Protected Area evacuation routes.
- Refer to PPM 13.7.5 for Alternate Assembly Area set up instructions.

H. In the event of an Exclusion Area evacuation requiring personnel to report to Energy Northwest Office Complex (ENOC), dispatch an HPC staff member to set up the assembly area. Refer to PPM 13.7.5 for guidance regarding setup and operation of the assembly area.

I. When radiological conditions require evacuation of the Columbia River, indicating the potential for contaminated boaters, or, if requested, provide for radiological monitoring of Columbia River evacuees per 13.9.8.

J. If plant conditions indicate the possibility of an offsite release or a site area emergency is declared, direct the Site Support Manager to call in an additional REM to assist in REM responsibilities.

K. If the determination is made to evacuate the Exclusion Area, determine if radiological hazards exist or are suspected. Determine evacuation routes and hazardous routes to avoid. Refer to PPM 13.5.3.

L. If conditions indicate the need for road closure, evacuation, or other protective measures, coordinate the safe placement of Energy Northwest or local law enforcement agency roadblocks with the Security Manager.

M. When notified that personnel must pass through road blocks into radiological hazard areas, determine and implement necessary radiological monitoring and protective clothing requirements.

N. A radioactive release is in progress when any of the following conditions exist:

- Valid reading exists which exceeds PPM 13.1.1 Table 3 Column UE, OR
- Offsite dose calculations meet or exceeds PPM 13.1.1 Table 4 Column UE levels for TEDE or CDE thyroid, OR
- Field teams measure GE 100 μRem/hr at 1.2 miles.

O. If a confirmed radioactive release is in progress, the following steps should be taken:

- Determine the advisability of sheltering or evacuating any manned Exclusion Area facility, i.e., Kootenai Building, Laundry, Energy Northwest, Ashe Substation, River Pumphouse, and determine and direct implementation of radiological protective actions for EOF personnel, based on radiological conditions.

- Refer to PPM 13.2.2, Section 4.3, Offsite PARs Based on Projected Doses, to determine offsite PARs and act as the Protective Action Decision Group spokesperson in proposing PARs to the EOF Manager (Emergency Director).

- Provide the Emergency Director with updated dose projection results. Information provided should include dose, dose rate, and the basis for the time used for the dose estimates.

- Notify the Emergency Director and the State and County Technical Liaisons if dose rates exceed 250 mRem/hr thyroid, or air sample results exceed 1.4E-7 μCi/cc Iodine 131. Ensure that this information is marked on the CNF.

P. Consult with the Field Team Coordinator to ensure the following:

- Dispatch field teams to traverse at designated distances (i.e., 1.2, 5, and 10 miles) and verify dose rate levels above 100 μrem/hr.
- Upon identification of a radioactive plume, commence air sampling activities.
- Identify plume centerline and boundaries (i.e., 100 μRem/hr).
- Determine the need for a dose adjustment factor based on dose projection results or reports from Field Team members indicating potential inhalation concern. The dose adjustment factor provides an internal component which should be multiplied by the dosimeter reading to give an estimate of total exposure.

Q. Using QEDPS, calculate a dose adjustment factor:

- If the dose adjustment factor is 5 or greater, a dose adjustment factor of 5 should be implemented.
- Provide the dose adjustment factor to the Field Team Coordinator for use in establishing field team exposure limits.

NOTE: Refer to PPM 13.2.1 for guidance on recommending administration of Potassium Iodide (KI) for emergency workers. Be aware that criteria for recommending KI for State, County and DOE personnel are different from those for Energy Northwest personnel.

- EOF Manager (as Emergency Director) authorization is required for issuance of KI.

R. Advise the Field Team Coordinator when protective actions need to be taken by field teams, such as KI.

S. Review Field Team summary and dose projection summary maps for the plume EPZ, and when applicable, the ingestion EPZ. Have copies transmitted to the JIC, County and State emergency centers.

T. Continually assess offsite radiological releases and determine the need to recommend to the Emergency Director to provide authorization to exceed Protective Action Guides (PAGs) for offsite emergency workers, in accordance with PPM 13.2.1, or general public Protective Action Recommendations (PARs) in accordance with PPM 13.2.2.

U. Brief all Energy Northwest and offsite MUDAC personnel of impending PAR declarations prior to issuing the PAR.

V. As necessary, complete radiological release-related portions of the CNF for PAR modifications.

W. Provide PAR updates to the EOF Information Coordinator for transmittal on the Information Coordinator's network.

X. Conduct periodic briefing sessions of the MUDAC staff on pertinent information from incoming hard copy communications and changes in emergency status.

Y. Act as a conduit for information flow between MUDAC, HPC personnel, and the main EOF area, and provide input into EOF briefings on status and activities of dose assessment, field monitoring activities, EOF habitability, etc., per Attachment 4.8.

Z. If necessary, direct the Site Support Manager to contact the Chemistry/Effluent Manager for support of field team sample analysis.

AA. Distribute MUDAC generated hard copy dose projection information (map and data sheets) to State and County Emergency Operations Centers (EOCs), and retain a copy for MUDAC records.

AB. When relief from the Health Physics Network (HPN) is requested by the RPM, select a communicator and direct that they maintain the EOF HPN line in accordance with Attachment 4.4. Consider calling in an additional Dose Projection Health Physicist to fill this position.

AC. If the following conditions exist:

- EOF general area radiation levels exceed 5 mRem/hr as indicated by the EOF radiation monitor, or;
- EOF unidentified airborne radioactivity exceeds 0.3 DAC (0.3 DAC equates to approximately 750 ccpm on a 40 ft^3 air sample in the field),

Then:

- Immediately notify the EOF Manager and staff of the condition;
- Direct surveillance of airborne activity be increased to once per hour and results reported to you;
- Direct dose rates in the area be determined approximately every 15 minutes and results reported to you;
- Direct that projected accumulated doses for the EOF personnel be evaluated and appropriate stay times be established;
- Prohibit eating or drinking in the EOF until advised of resolution of the EOF airborne activity problem.

AD. Dispatch a Health Physics Technician to the Kootenai Building penthouse to determine if the following conditions exist if the plume is over the Kootenai Building:

- Kootenai Building intake air activity exceeds 100 mRem/hr, or;
- Kootenai Building return air activity exceeds 50 mRem/hr, then:

    A. Immediately notify EOF Manager and staff of the condition.

    B. Ensure EOF ventilation system is in proper operating mode per Attachment 4.10.

    C. Request the Site Support Manager to notify Facilities to assist, if needed.

AE. If the emergency worker dose limit of 5 rem is projected to be exceeded over the course of the event for the EOF staff, inform the EOF Manager so plans to evacuate the EOF and activate the Alternate EOF may be initiated.

AF. As required, direct appropriate staff to perform the following tasks in accordance with Attachment 4.5:

- Prepare, issue, and collect direct reading dosimeters and TLDs for emergency response personnel.
- Contact Nuclear and Engineering Support Training to determine if respirator training, medical qualifications, and fit testing for emergency support personnel, vendors, and contractors who must enter areas requiring respiratory protection are current.

AG. If questioned by State or County officials, provide briefings that explain EOF radiological survey data and dose projection activities that determined Energy Northwest recommendations for protective actions.

AH. If Washington State Radcon teams are not available, and establishment of an offsite survey or remote decontamination location is required to handle potentially contaminated personnel, make arrangements for the necessary personnel and equipment.

AI. If injured or contaminated personnel require offsite medical attention, refer to PPM 1.9.14.

AJ. If additional Energy Northwest personnel resources are needed for Environmental Field Teams, dose assessment or other EOF radiological duties, request the Site Support Manager obtain those resources.

AK. Assist the Site Support Manager as necessary to establish second shift personnel for dose assessment area staff, environmental field teams and HPC staff.

AL. If offsite radiological resources are needed, inform the EOF Manager.

AM. Determine disposition of Environmental Field Team samples gathered pursuant to PPM 13.9.5:

A. In consultation with representatives of DOH for samples outside the Hanford Reservation.

B. In consultation with representatives of DOE-RL for samples on the Hanford Reservation.

AN. Upon notification of transfer of PASS samples, brief HPC staff on anticipated radiation levels and necessary protective measures.

AO. Ensure field teams identify the back edge of the radioactive plume to confirm the release has ended (i.e., LT 100 μRem/hr).

AP. When emergency activities have resulted in stabilizing the plant, and radiological conditions are progressing from the early phase to the intermediate phase, refer to Attachment 4.11 to transfer MUDAC leadership to the Washington State Department of Health (WADOH) Representative, and:

- Implementing PPM 13.13.3, Intermediate Phase MUDAC Operations.
- Arranging additional support with the Site Support Manager to fulfill all responsibilities of MUDAC during this phase.

AQ. Estimate the total population exposure as a result of the radiological release. Consider total dose from EDPS, duration and length of exposure. Refer to Attachment 4.9.

AR. Coordinate the use of Energy Northwest radiological equipment and manpower resources, authorized by the EOF Manager, to provide assistance to the State in establishing relocation centers, food control zones, or other reentry and recovery activities.

AS. Refer all calls from the media to the Joint Information Center.

AT. Upon shift change, turn over chronological logs and brief your relief on the current status of the emergency, radiological activities, and status of work being performed.

Duties of: Dose Projection Health Physicist

Assigned Location: Meteorology and Unified Dose Assessment Center (MUDAC)

Report to: Radiological Emergency Manager (REM)

Responsibilities:

1. Activate the Emergency Dose Projection System (EDPS) PCs, printers, the LAN and PDIS terminals. Keep the REM updated on the status of the systems and important information that could affect dose projections.

2. Activate the RSTAT summary display (a PDIS form display of TDAS signals from the STAR System) and determine if there are elevated readings from monitors that may indicate a release in progress. PDIS may be used to retrieve past TDAS readings. Contact the EOF PDIS Analyst to retrieve historical data.

3. Perform plume tracking and dose projection functions to keep the EOF staff informed of the plume projection. Maintain close contact with the Engineering Assessment group and Information Coordinator for the current plant condition.

4. Obtain the latest weather forecast (refer to the EDPS User's Manual) from the National Weather Service or PNNL Weather Forecaster, and ensure the Meteorological Information board is updated. Advise the REM and Field Team Coordinator of weather conditions which may affect plume direction, deposition, or dispersion.

   NOTE: Phone numbers of the weather services are located in the Emergency Phone Directory in the Offsite Agency Section and PPM 13.8.1.

5. Review dose projection results and inform the REM of projections approaching EAL and PAR limits.

6. Complete a dose projection for the REM's consideration.

   a. Verify operability of SGTS based on flow rate or engineering input.

   b. Follow the guidance in PPM 13.8.1 concerning default entries and estimates for the dose projection models.

   c. Make dose estimates for at least the distances of 1.2 miles, 2 miles, 5 miles, and 10 miles.

      NOTE: 1.2 miles is the distance used for the site boundary.

Duties of: Dose Projection Health Physicist (Contd.)

7. Coordinate and verify radiation conditions and equipment status with the Radiation Detection Systems Engineer.

8. Compare field team measurements to dose projection estimates using the guidance in Attachment 4.3, including terrain knowledge, weather conditions and sampling theory.

9. If there are significant, unexplainable differences between field samples and dose projections, consult with the REM regarding appropriate adjustments to be made.

10. Inform the Field Team Coordinator, REM, and staff of significant, verifiable changes in release rates, meteorology, or Emergency Worker Dose Factors.

11. As requested, provide completed Dose Projection Summary Maps for the REM to review.

12. Label and validate by signature, printed data or maps for distribution, and maintain a copy of all authorized projections and maps.

13. When the transition to ingestion phase has been completed, generate an EDPS dose projection map for the 500 μR and 2 μR isopleths. Refer to PPM 13.8.1, Attachment 5.1 for guidance on contour options.

14. During shift change, brief your relief on the current status of work in progress, and ensure that they understand the basis for the current dose projection and field team readings.

15. Prepare and deliver to the REM all After Action Reports, logs, authorized projections and analyses as requested.

16. Retain a copy of completed dose projection worksheets, display outputs or maps you generate and attach them to your After Action Report.

17. Assist the HPN Coordinator in obtaining answers to NRC queries.

COMPARISON OF FIELD DATA WITH DOSE PROJECTIONS

1. Exposure Rate Readings

   a. Using QEDPS, input field team air sample results or dose rate into the code and compare resultant TEDE values at various distances with TEDE values from a projection based on plant monitor readings.

   b. Compare exposure rate measurements reported by field teams to a projected External Dose Rate for the same downwind distance.

   c. Consider the following in making your comparison:

      1) The time that the field measurement was made vs. the time that the projected release would reach the downwind distance based on wind speed.

      2) If release rates change significantly, then consider the time it would take the lower or higher effluent concentrations to reach the field team measurement location based on wind speed.

      3) Changes in sampling time, wind speed, wind direction, and stability class will cause field team readings to differ from dose projections.

2. Iodine Concentrations

   a. Using QEDPS, input field team air sample results and compare resultant Thyroid CDE values at various distances with Thyroid CDE from a projection based on plant monitor readings.

      1) To convert field team air sample results to μcuries/cc, select either the particulate or cartridge icon on the Windows Desktop. When the program is active, enter the field team results to calculate the necessary value.

      2) Compare the Thyroid CDE rate based on field team data to a projected Thyroid CDE rate for the same downwind distance.

   b. Consider the items from Step 1.C of this Attachment when making your comparison.

Duties of: Health Physics Network (HPN) Communicator

Assigned Location: Emergency Operations Facility (EOF)

Report to: Radiological Emergency Manager

Responsibilities:

1. Upon assignment obtain a briefing from the REM on the current status of the emergency and the known or anticipated radiological conditions and/or releases.

2. Activate the EOF extension of the HPN phone, following instructions attached to the HPN phone. Introduce yourself to the NRC communicator, and provide information on the current status of radiological conditions.

   a. Refer to side two of form 968-26045, Emergency Classifications or Other Messages, for a list of questions you may be asked by the NRC.

3. After assuming duties observe the requirements of 10CFR50.72(c)(3) by maintaining continuous communications when requested by the NRC. If you must leave the phone for any reason, find someone to maintain the phone in your absence, or obtain permission to leave the phone unattended.

4. Maintain a log of communications on Emergency Response Log, (Form 968-23895).

5. Contact the REM for assistance with resolving NRC information requests. Consult the REM when asked to make commitments you do not feel you are authorized to make.

6. As necessary, brief the REM on the status of HPN communications.

7. Ensure transmissions you relay are distinct and understood. Avoid the use of acronyms unless you are sure they are understood and ensure the correct letters of acronyms are understood by using phonetic spelling to clarify, i.e., "B" as in Bravo or "D" Delta.

8. Ensure data you transmit to the NRC represents factual information only. Do not provide speculative information or editorialize on data and do not engage in problem solving discussions.

9. Upon shift change, brief your relief on responsibilities, duties and the current status of HPN communications with the NRC.

10. Upon shift change or termination of the emergency:

    a. Prepare an individual After Action Report. Refer to PPM 13.13.4.

    b. Deliver After Action Report and logs to the REM.

Duties of: Health Physics Center (HPC) Staff

Assigned Location: Health Physics Center Work Areas

Report to: Radiological Emergency Manager (REM)

Responsibilities:

NOTE: At an Alert or higher classification, Security provides an officer to lock down the Kootenai Building; the officer then assists the HPC staff with access control through the HPC ambulance bay.

HPC Staff:

1. Prepare ambulance garage area and decontamination facility to receive samples and personnel. Ensure PA speaker controls are set to maximum levels. Refer to Attachment 4.7.

2. Prepare the radiological laboratory and Counting Room to receive and analyze environmental and in-plant samples.

3. Position a Continuous Air Monitor (CAM) in the lower level south end Kootenai Building near the EOF and ensure operability of the EOF area radiation monitor for EOF habitability monitoring.

4. Report to the REM when all assigned systems are in a state of readiness.

5. Obtain friskers and dose rate instruments, perform daily checks, then distribute to the Ambulance Bay area radiological laboratories.

6. Frequently monitor the operation of the area radiation and airborne monitors.

7. When directed, take and evaluate direct radiation and/or contamination surveys in areas of the Kootenai Building and EOF.

8. Question Field Team members delivering samples on whether self-frisking has been performed by, or under the supervision of a qualified HP member, and if not, perform a frisk.

9. Obtain and analyze hi-volume air samples inside and outside of the Kootenai Building as necessary.

HPC Staff, (cont'd)

10. Perform decontamination of personnel as required and report results to the REM.

11. Insure the use of appropriate radiological precautions and good practices by all individuals involved with handling of samples throughout the sampling and survey sequence.

12. Enter electronic dosimeter results in the Total Exposure System (TES) for personnel completing a shift, or as directed. Reset dosimeter to the fast entry mode.

13. Return reset electronic dosimeters to the EOF Field Team Cabinet.

14. Monitor radiation levels in any area where samples are stored and post area(s) as necessary, or move samples to a shielded area.

15. Maintain a record of your actions on an Emergency Response Log per PPM 13.13.4.

16. Upon shift change, brief your relief on responsibilities, duties and current status of work being performed.

17. Upon shift change, or termination of the emergency:

    a. Prepare an individual After Action Report per PPM 13.13.4.

    b. Deliver your After Action Report and Log(s) to the REM.

HEALTH PHYSICS CENTER STAFF
RADIOLOGICAL SAMPLE TRACKING INSTRUCTIONS

1. Receive, survey, sort and catalog samples as they are delivered by Environmental Field Teams.

2. Adhere to appropriate radiological precautions and good practices in the handling of samples throughout the sampling and survey sequence.

3. Question Field Team members delivering samples on whether self-frisking has been performed by, or under the supervision of a qualified HP member, and if not, perform a frisk.

4. For receipt and handling of PASS samples ensure that appropriate cautions are in place and that all personnel are properly dressed out for all aspects of survey and handling procedures.

5. Perform radiation and contamination surveys on all incoming samples. Rebag all samples which are contaminated on the outer surface. Sort and store samples based on radiation levels to control exposures in the ambulance bay.

6. Ensure sample identification data is on the outside of the sample bag and the date, time and survey results are on Sample Identification Form.

7. Place the sample in storage and note the storage location on the Sample Identification Form and enter the storage date and time on the Sample Receipt Log, page 2 of this attachment.

8. When analysis of a specific sample is requested, retrieve sample and the appropriate copies of the Sample ID Form.

9. Record the new location (lab where sample is being analyzed) on the Sample ID form and the date and time of transfer on the Sample Receipt Log.

10. Send the sample to the lab or other assigned destination with the accompanying white and canary pages.

11. Refile the pink page of the Sample Identification Form in the HP Center file.

12. When samples are returned to the storage area, retrieve Sample Identification Form from HP Center file.

13. Note storage location on the white, canary and pink pages and enter the new storage date and time on the Sample Receipt Log.

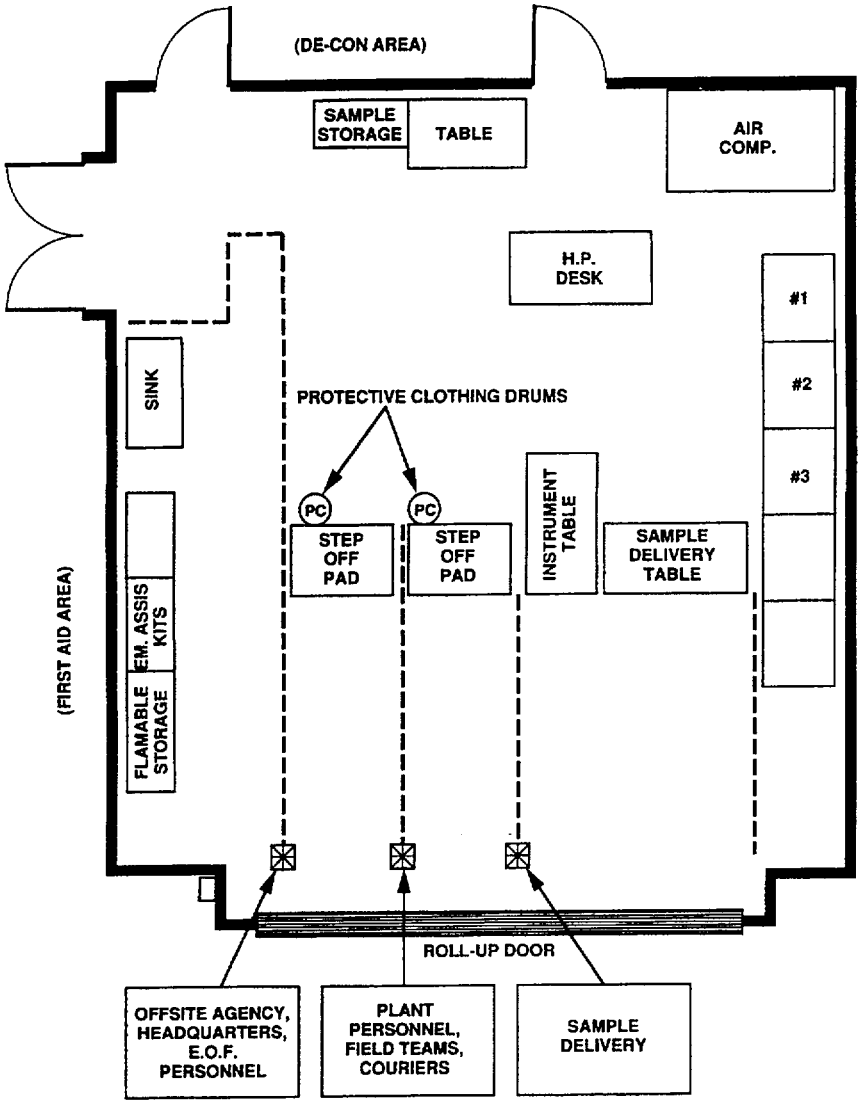
14. Return the canary and pink copies to the HP Center file and return the white copy with the sample back to storage.

HEALTH PHYSICS CENTER STAFF
RADIOLOGICAL SAMPLE TRACKING INSTRUCTIONS

SAMPLE RECEIPT LOG

SAMPLE IDENTIFICATION NUMBER	STORAGE		LAB		STORAGE		REMARKS
	DATE	TIME	DATE	TIME	DATE	TIME	

TYPICAL SET-UP FOR HP CENTER RECEIVING AREA



LEGEND:

1. ---- INDICATES WHERE TO PLACE ROPE BARRIERS
2. ⊠ INDICATES WHERE TO POST SIGNS

890276

Attachment 4.7

RADIOLOGICAL EMERGENCY MANAGER BRIEFING GUIDELINES

NOTE: Items listed here are suggested topics for routine update briefing. Items actually selected should be used based on existing or projected plant or radiological conditions.

Radiological Emergency Manager (REM) update items:

a. Current release rate, recent trends, prognosis.

b. Offsite dose projection results and most recent follow-up messages to offsite authorities.

c. Energy Northwest (and offsite agency) field team survey results and their comparison to dose projection model results.

d. Dose projection comparison with state or other agency results.

e. Current and forecast meteorology on wind direction, shifts.

f. Status of offsite protective action implementation.

g. EOF habitability survey results and any protective actions or safe routes necessary for emergency workers outside the EOF.

h. Problem areas needing resolution.

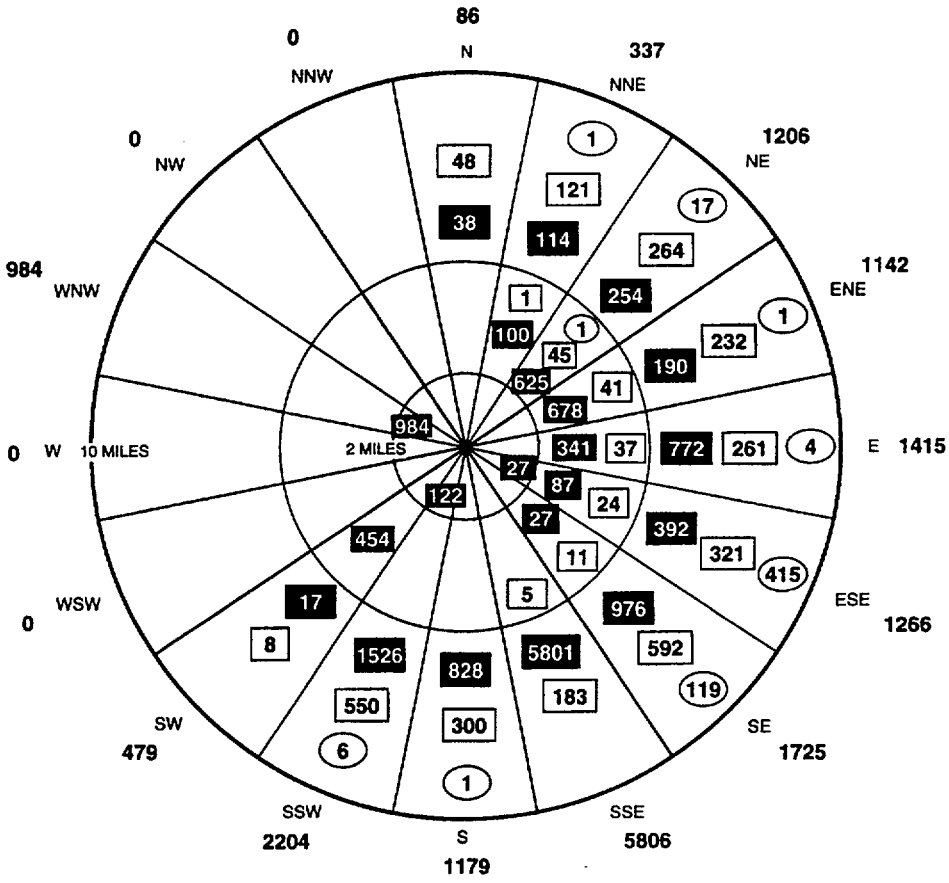
i. NRC counterpart status report (if present).

Notes: _____

_____

_____

TOTAL POPULATION WITHIN THE 10 MILE EPZ



17,829 TOTAL SEGMENT POPULATION 0 TO 10 MILES

POPULATION TOTALS - PERMANENT			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	164	0-5	164
5-10	2880	0-10	3044

POPULATION TOTALS - TRANSIENT			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1133	0-2	1133
2-5	2312	0-5	3445
5-10	10,775	0-10	14,220

POPULATION TOTALS - SPECIAL			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	0	0-2	0
2-5	1	0-5	1
5-10	564	0-10	565

POPULATION TOTALS			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	1133	0-2	1133
2-5	2477	0-5	3610
5-10	14,219	0-10	17,829

870747.8
June 1996
Rev 18

Attachment 4.9

EOF HVAC AUTOMATIC AND MANUAL OPERATION

MODE 1 - Kootenai Building Isolation

If outside air activity causes the intake air radiation monitor on AHU-1 to trip at 100 mR/hr, the HVAC panel in Room 121 will indicate as follows:

AHU-1:	lighted	AHU-2:	lighted	Misc.:	lighted
EOF ISOL.:	off	AD4B:	off	SF3:	lighted

This configuration isolates the Kootenai Building and recirculates first floor air through HEPA filters.

MODE 2 - EOF Isolation

If return air activity causes the return air radiation monitor on AHU-1 to trip at 50 mR/hr, the HVAC panel in Room 121 will indicate as follows:

AHU-1:	lighted	AHU-2:	lighted	Misc.:	lighted
EOF ISOL.:	lighted	AD4B:	lighted* off**	SF3:	off

In this configuration, the EOF is sealed off from the rest of the Kootenai Building. Fan SF-3 recirculates EOF air through HEPA filters.

* Chem Lab exhaust hood is OFF.
** Chem Lab exhaust hood is ON.

MODE 3 - EOF Stagnation

If the SF-3 return air radiation monitor trips at 50 mR/hr, SF-3 will stop and the EOF will remain isolated as in Mode 2. The SF-3 light on the Room 121 panel will be ON.

MANUAL OPERATION

> CAUTION: Due to the potential for airborne contamination and area radiation, HP surveys of the following areas should be performed prior to entry.

Modes 1 & 2:

Obtain EOF HVAC key (1 F 8) from EOF key locker. Enter stairwell on 2nd floor east side by Auditorium entrance.

At top of stairs, continue left 180°, facing east wall. Above handrail at your left are two radiation indicators. Above the indicators, the gray box contains the switches for Modes 1 and 2.

Mode 3:

Enter SF-3 fan room, room 123. Radiation indicator is inside large gray cabinet on north wall next to door facing Room 121. Disconnect switch for SF-3 is around other side of fan from radiation indicator, on north wall. Throw this switch to OFF to stop SF-3.

DOSE ASSESSMENT CENTER LEADERSHIP TRANSFER GUIDE

Transfer of MUDAC leadership from Energy Northwest to the State of Washington occurs following conclusion of the Plume phase. The transfer signals the beginning of the ingestion pathway or intermediate phase.

Prior to the transfer, the following conditions should be met:

1. Plant conditions are stable
2. The immediate emergency has been mitigated
3. No further threat of a radioactive release exists that could exceed Protective Action Guidelines (PAGs) to the public
4. The plume has dispersed and no longer threatens to exceed PAGs.

The following documentation should be provided to the Washington State Health Liaison during the transfer:

1. Classification Notification Forms (CNFs) identifying PARs and notifications on Potassium Iodide (KI)
2. Emergency dose projection results
   - Include both the data sheet and map projections
3. Airspace closure requests

Conduct a briefing with the Washington State Health Liaison addressing the following:

1. Status and duration of the release _____
2. Air sample results _____
3. Meteorological conditions, including wind speed _____

   Direction: _____ Stability: _____
4. Current field team deployment: _____
5. Offsite Protective Action Decisions (evacuations, etc.) _____

   _____

13.11.10

ENERGY NORTHWEST

USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.11.10	JEW - Revision 16	05/10/02

VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
EMERGENCY OPERATIONS FACILITY

TITLE
SECURITY MANAGER DUTIES

TABLE OF CONTENTS

1.0 PURPOSE

This procedure describes the emergency responsibilities of the Security Manager in coordinating the actions of the Security Force and, when necessary, local law enforcement agencies during emergency events.

2.0 REFERENCES

2.1 FSAR Chapter 13.3, Emergency Plan, Sections 2 and 6

2.2 PPM 13.5.1, Localized and Protected Area Evacuations

2.3 PPM 13.5.3, Evacuation of Exclusion Area and/or Nearby Facilities

2.4 PPM 13.13.4, After Action Reporting

3.0 PROCEDURE

3.1 Security Manager Responsibilities

3.1.1 Proceed to the Emergency Operations Facility (EOF) when notified of an Alert, Site Area Emergency or General Emergency, or if so directed.

3.1.2 Sign in on the Sign-In Board, obtain procedure book from wall rack and supply drawer from EOF supply cabinet.

3.1.3 Notify the Site Support Manager or EOF Manager of your availability.

3.1.4 Establish and maintain periodic communication with the Security Supervisor and Security Communications Center (SCC).

- Verify the roadblock officer has been dispatched to open Gate 1-8, the South Power Plant Loop vehicle gate.

3.1.5 Contact the SCC and assume Site 1 evacuation notification responsibilities.

3.1.6 Record significant actions, events and their resolutions on the Emergency Response Log for attachment to your After Action Report. See PPM 13.13.4 for after action reporting.

3.1.7 Direct Energy Northwest Security assigned to roadblocks to control access as follows:

Admit personnel with identification establishing employment with Energy Northwest, DOE (or one of their subcontractors), state

(Washington or Oregon), county, FBI, NRC, FEMA, Coast Guard or local law enforcement agencies without further clearance.

3.1.8 Obtain clearance for emergency vehicles and personnel to enter the Protected Area from the TSC Manager.

3.1.9 Make decisions on authorizing unbadged personnel access through Energy Northwest roadblocks or access to the EOF.

3.1.10 Evaluate Security manning needs and authorize the call out of additional personnel, as required. Coordinate with HP Center staff and responding Security Officer for accountability of evacuees reporting to the EOF.

3.1.11 Confer with the EOF Manager to determine if the emergency requires a Safety representative. If so, coordinate call-out with the Site Support Manager.

3.1.12 When an offsite accident results in injury or death to an Energy Northwest employee, obtain the name(s) and coordinate next-of-kin notification with the Human Resources Manager of Compensation and Benefits.

3.1.13 Coordinate response actions with local law enforcement agencies as necessary. Provide information that may affect offsite traffic control point operations to the Local Law Enforcement Agency representative in the Benton or Franklin County EOC.

3.1.14 If the Offsite Assembly Area is expected to be used, contact the REM at an Alert to determine if a Security Offer should be dispatched to the Offsite Assembly Area.

3.1.15 At a Site Area Emergency, implement actions for evacuation of Site 1 personnel. Refer to PPM 13.5.3 for Site 1 and Exclusion Area evacuation information.

3.1.16 If evacuation or relocation of onsite or offsite Security personnel is necessary due to an actual or potential radioactive release, coordinate with the REM regarding where to relocate and hazardous conditions to avoid.

3.1.17 Brief the EOF Manager on all Security operations and be prepared to offer update briefings to EOF staff in accordance with the guidelines of Attachment 4.1.

3.1.18 If a report is received of missing person(s) outside the Protected Area but within the Exclusion Area, coordinate search and rescue operations using the following as general guidelines:

- Attempt to locate the missing individual by using portable communications or public address systems available in the TSC.
- Determine the missing individual(s) last known location and/or job assignment through the individual's supervisor/manager.
- Using whatever resources are available (call-out as necessary), assign appropriate personnel to a search and rescue team.
- If a radiological hazard is suspected, consult with the REM to determine radiological equipment needed, acceptable dose limits, and safe routes to and from search area(s).

3.1.19 Brief the search and rescue team members on:

- Who is designated team leader
- Identity of missing individual(s)
- Last known location(s)
- Area(s) to be searched
- Expected conditions and hazards to be anticipated in the search area(s), and equipment needed
- Safe routes in, out, and within search area(s)
- Acceptable limits of exposure to hazards in search area(s)

3.1.20 Direct the team leader to establish and maintain radio communication with the EOF throughout search and rescue, and that you be informed of progress and any problems encountered.

3.1.21 Keep the EOF Manager informed of search and rescue progress and problems encountered.

3.1.22 When the search operation is terminated, ensure team members return equipment and receive radiological monitoring and decontamination, as necessary.

3.1.23 Direct team members prepare an After Action Report per PPM 13.13.4.

3.1.24 Upon shift change, fully brief your relief on responsibilities, duties and current status of security actions being taken.

3.1.25 Upon shift change or termination of the emergency:

- Prepare an individual After Action Report. Refer to PPM 13.13.4.
- Collect the individual After Action Reports prepared by staff personnel.
- Deliver all After Action Reports and Logs to the an Emergency Preparedness representative.

4.0 ATTACHMENTS

4.1 Security Manager Briefing Guidelines

SECURITY MANAGER BRIEFING GUIDELINES

NOTE: Items listed here are suggested topics for routine update briefing. Items actually selected should be based on existing or projected situation conditions.

Security Manager update items:

a. Security activities in support of emergency operations.

b. Review Security requirements for EOF access, access roadblocks, plant badge issuance, etc.

c. Status of Protected Area or Exclusion Area evacuation and accountability issues.

d. Status of offsite agency response and civil authority roadblocks or river evacuation activities, if applicable.

e. Summarize any significant discussions/direction from local law enforcement authorities.

f. Problem areas needing resolution.

g. NRC counterpart status report (if present).

Notes: _____

_____

_____

13.14.4

ENERGY NORTHWEST

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.14.4	JEW - Revision 39	05/10/02

VOLUME NAME
EMERGENCY PLAN IMPLEMENTING PROCEDURES

SECTION
SUPPORTING INFORMATION PROCEDURES

TITLE
EMERGENCY EQUIPMENT

TABLE OF CONTENTS

1.0 PURPOSE

This procedure describes requirements for inspection, inventory, and functional testing of emergency equipment and supplies which are maintained for emergency operations, and are not listed under other approved procedures. {R-5928}, {R-7347}

2.0 DISCUSSION

Quantities listed are minimum amounts. More than the minimum amount listed is acceptable. Minimum amounts are allowed to be less than specified provided that quantities in question are returned to the proper amount as soon as practicable.

The Supervisor, Emergency Preparedness may make determinations for changes to quantities, types of items, or functional tests as required for good emergency preparedness practices.

A Level 1 library is maintained by Administrative Services as part of the Technical Support Center. Sufficient Level 1 Procedures, drawings, and other documentation are maintained in this library to support the Technical Support Center staff.

3.0 REFERENCES

3.1 FSAR Appendix F, Table F.03-01, B.5, Administrative Procedures, Controls, and Fire Brigade {R-7347}

3.2 Columbia Generating Station Emergency Plan

3.3 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans And Preparedness In Support Of Nuclear Power Plants, Section H (10)

3.4 PER 293-1343

3.5 PER 201-2521

3.6 PER 201-2665

3.7 10CFR50, Appendix E {R-5756, R-5928}

3.8 10CFR50, Appendix R {R-6917, R-6918, R-10307, R-10309, R-10311}

3.9 GO2-92-257, letter to NRC regarding ERDS Data Point Library, 11-24-92

3.10 Columbia Generating Station Final Safety Analysis Report, Appendix F, Table F.3-2, Section III.H

3.11 PPM 2.9.5, Plant Communications Systems

3.12 PPM 13.14.9, Emergency Program Maintenance

3.13 PPM 13.10.6, Plant/NRC Liaison Duties

3.14 SPIP-SEC-03, Response Team Leader, Owner Controlled Security Area Patrols, Mobile and Walk Patrols

3.15 EPI-15, ERDS Quarterly Test

3.16 Emergency Response Log, 968-23895

3.17 Classification Notification Forms, 968-24075

3.18 Event Notification Worksheet, NRC Form 361, 968-25665

3.19 Repair Team Briefing/Debriefing Form, 968-25560

3.20 Emergency Director Turnover Sheet, 968-25810

3.21 10 Mile EPZ Dose Projection and Data Map Form, 968-25831

3.22 Skin/Clothing Contamination Report, 968-24080

4.0 PROCEDURE

4.1 Supervisor, Radiological Operations Responsibilities

4.1.1 Ensure cabinets or vehicles containing emergency first aid, fire brigade equipment, or radiological protection equipment are checked at the locations, and per instructions outlined in Attachments 5.1-1, 5.1-2, 5.1-3, 5.1-4, 5.1-5, and 5.1-7.

4.1.2 Ensure the following are checked per the instructions outlined in Attachment 5.2, EOF/ENOC Emergency Equipment:

Field Monitoring Kits:

Location:

- Kootenai Building and MPF

Decon Storage Area:

Location:

- ENOC Room 1-208A, MPF

River Evacuation Kits:

Location:

- ENOC

Equipment for Post Accident Sample System (PASS):

Location:

- Ambulance Bay
- Counting Room
- Chemistry Lab

4.1.3 Ensure that the HVAC is checked per instructions outlined in Attachment 5.8, Ventilation Radiation Monitoring.

4.1.4 Completed work order packages should be forwarded to Records Processing.

4.2 Shift Manager Responsibilities

4.2.1 Ensure the Fire Brigade Leader, per the Columbia Generating Station Fire Marshal, performs inventories and operational checks of locations containing emergency fire equipment outlined in Attachment 5.1-1 after each use.

4.2.2 Ensure an onsite, six hour supply of reserve air is provided to permit quick replenishment of exhausted air supply cylinders as they are returned. {R-10309}

4.2.3 Ensure that the following alarm systems are demonstrated per the instructions outlined in Attachment 5.1-6, Plant Emergency Alerting Signals:

Plant Exclusive Use Signals:

Location: Control Room

- Alerting Tone

4.2.4 Completed work order packages should be forwarded to Records Processing.

4.3 Manager, Operations, Responsibilities

4.3.1 Ensure the Control Room is checked per the instructions outlined in Attachment 5.7, Emergency Center Equipment and Supplies.

4.3.2 Completed work order packages should be forwarded to Records Processing.

4.4 Supervisor, Security Force Responsibilities

4.4.1 Ensure the Security Communications Center is checked per the instructions outlined in Attachment 5.7, Emergency Center Equipment and Supplies.

4.4.2 Ensure that a quarterly inventory of roadblock kits is completed per Attachment 5.11 (PTL R 186980).

4.4.3 Completed work order packages should be forwarded to Records Processing.

4.5 Information Services Network Operations Manager Responsibilities

4.5.1 Ensure that the Communications Systems are checked per the instructions outlined in Attachment 5.5, Communications System Tests.

4.5.2 Completed work order packages should be forwarded to Records Processing.

4.6 Construction and Maintenance Services Manager Responsibilities

4.6.1 Ensure that the HVAC and diesel generators are tested per instructions outlined in Attachment 5.9, Facilities Systems Tests.

4.6.2 Completed work order packages should be forwarded to Records Processing.

4.7 Supervisor, Emergency Preparedness Responsibilities

4.7.1 Ensure the Technical Support Center, Operations Support Center, the Joint Information Center, and the Emergency Operations Facility is checked per the instructions outlined in Attachment 5.7, Emergency Center Equipment and Supplies.

4.7.2 Completed work order packages should be forwarded to Records Processing.

4.7.3 Ensure the following cabinets are checked in accordance with the instructions outlined in Attachment 5.3, Hospital Radiological Emergency Kits:

Hospital Radiological Emergency Kits:

Locations:

- Kadlec Medical Center, Emergency Room Storage Cabinet
- Kennewick General Hospital, Emergency Room Entrance Area
- Our Lady of Lourdes, Nuclear Medicine Area

4.7.4 Ensure the Emergency Phone Directory is maintained per the instructions outlined in Attachment 5.4, Emergency Planner Communications System Tests.

4.7.5 Ensure the dedicated telephone lines are checked per the instructions outlined in Attachment 5.4, Emergency Planner Communications System Tests.

4.7.6 Ensure the Emergency Response Data System (ERDS) is tested quarterly as outlined in Attachment 5.5, Communications System Tests.

4.7.7 Hardware or software changes that affect transmitted ERDS data points identified in Attachment 5.10 shall be provided to NRC within 30 days after the change is made.

4.7.8 Hardware or software changes, except data point modifications, that could affect ERDS data transmission format or computer communication protocol with ERDS shall be provided to NRC at least 30 days prior to implementing the modification.

4.7.9 Monitor compliance with this procedure's requirements, and take action to ensure discrepancies are corrected.

4.8 Supervisor, Industrial Safety & Occupational Health Responsibilities

4.8.1 Ensure that the nurse's station medical equipment and supplies are checked per Attachment 5.6, Nurse's Station Medical Equipment and Supplies.

4.8.2 Reset the PTL due date to the next required interval.

5.0 ATTACHMENTS

5.1 Columbia Generating Station Emergency Equipment

5.2 EOF/ENOC Emergency Equipment

5.3 Hospital Radiological Emergency Kits

5.4 Emergency Planner Communications System Tests

5.5 Communications System Tests

5.6 Nurse's Station Medical Equipment and Supplies

5.7 Emergency Center Equipment and Supplies

5.8 Ventilation Radiation Monitoring

5.9 Facilities Systems Tests

5.10 Emergency Response Data System (ERDS)

5.11 Roadblock/Sweeper Kit Inventory

COLUMBIA GENERATING STATION EMERGENCY EQUIPMENT

5.1-1 Fire Brigade Stations {3.1}

5.1-2 Decontamination Kits {3.1}

5.1-3 First Aid Kit, Type A {3.1}

5.1-4 First Aid Kit, Type B {3.1}

5.1-5 Emergency Protective Equipment Kit (TSC) {3.1}

5.1-6 Plant Emergency Alerting Signals

5.1-7 Emergency Protective Equipment Kit (OSC)

Attachment 5.1

ITEMS IN/NEAR
FIRE BRIGADE STATIONS

STATION 1

{R-6917, R-10307, R-10311, R-6918}

ITEM	MINIMUM
Battery, 6 Volt Lantern	5
Bolt Cutter	1
Chain Wrench	1
Sledge	1
Fire Axe	1
Pinch Bar	1
Hacksaw Frame/Blade	1
Pocket Knife	1
Spanner Wrench	5
Pipe Wrench	2
6 Volt Lantern	5
Nylon Rope, 100 feet	1
Leather Gloves	10 Pair
Personal Alert Safety System (PASS) devices	10
SCOTT Air-Pak 50 Self Contained Breathing Apparatus	10
SCOTT Envoy RadioCom, Mounted on each SCBA unit	10
Spare Air Cylinders	20
Stretcher	1
Smoke evacuation fan and exhaust trunk	1
Radios (Motorola HT-1000) on charger	6
Radio batteries (alkaline)	6
Megaphone	1
Personnel/SCBA Accountability Board	1
Power Block Pre-Fire Plans	1 set
Non-Power Block Pre-Fire Plans	1 set

ITEMS IN/NEAR
FIRE BRIGADE STATIONS

STATION 1, cont'd

{R-6917, R-10307,
R-10311, R-6918}

ITEM	MINIMUM
* Fire Brigade Leader cart, including:	1
- Spanner wrenches	2
- Pipe Wrench	1
- Nylon rope, 100 feet	1
- Gloves (one Large, one XL)	2 pair
- Nomex hoods	2
- Radios	2
- Radio batteries	2
- Flashlights, 6V lantern	2
- Batteries, 6V	2
- Flashlights, helmet style	2
- Hose nozzle (with ball shut off valve)	1
- Telephone, with cord	1

ITEMS IN/NEAR
FIRE BRIGADE STATIONS (Cont.)

STATION 2 (Building 62)

{R-6917, R-10307, R-10311, R-6918}

ITEM	MINIMUM
Battery, 6 Volt Lantern	5
Bolt Cutter	1
Chain Wrench	1
Sledge	1
Fire Axe	1
Pinch Bar	1
Hacksaw Frame/Blade	1
Pocket Knife	1
Spanner Wrench	5
Pipe Wrench	2
6 Volt Lantern	5
Nylon Rope, 100 feet	1
Leather Gloves	10 Pair
Personal Alert Safety System (PASS) device	10
SCOTT Self Contained Breathing Apparatus	10
Spare Air Cylinders	35
Stretcher	1
Smoke evacuation fan and exhaust trunk	1
Radios	6
Megaphone	1
Personnel/SCBA Accountability Board	1
Power Block Pre-Fire Plans	1 set
Non-Power Block Pre-Fire Plans	1 set
Foaming agent	4
Foaming agent eductor	1

EMERGENCY RESPONSE VAN

ITEM	MINIMUM
1 1/2″ hose - 200 feet	1
2 1/2″ hose - 300 feet	2
1 1/2″ Adjustable Fog Nozzles	2
Hydrant Wrench	2
2 1/2″ x 1 1/2″ x 1 1/2″ Gated Wye	1
2 1/2″ Gate Valve	1
20# ABC Extinguisher	2
Halon Extinguisher	1

Passport Work Item: FPSYS108

Locations:

- Kit 1E - 441′ elevation, Turbine Building, Fire Brigade Station 1
- Kit 2E - Building 62, Fire Brigade Station 2
- Kit 3E - Fire Response Van - Protected Area

Monthly (and after use):

SCBA, inspect as follows:

- Verify the SCBA regulator and reducer calibration dates will not be exceeded prior to the next monthly inspection.
- Verify all air cylinders full, GTE 4000 psi
- Verify SCBA units are properly staged, including shoulder and waist straps fully extended, and proper staging of regulator, Envoy-RadioCom wires, and PASS tether.
- Reseal cabinet/case when done

Remainder of equipment:

- Verify calibration/expiration dates will not be exceeded prior to next monthly check.
- Inventory contents and ensure minimum quantities are present
- Perform operational checks
  - Six-volt battery lanterns/flashlights
- Check physical condition of station/van contents and replace items, as necessary.

ITEMS IN/NEAR DECONTAMINATION KITS {R-5756}

ITEM	MINIMUM
Body Outline Forms	6
Facial Tissue	2 Boxes
Cotton Rolls or Balls	2 Boxes
Cotton Tip Applicators	100
Liquid soap	1 Bottle
Washcloths	25
Procedures	1 Set
Masking Tape	1 Roll
Disposable Cups	25
Plastic Bags	10
Sample Envelopes	20
Scissor	1
Skin Conditioner	1
Soft Scrub Brush	2
Nail Brush	1
Surgical Gloves	10 Pair
Toweling (487' RW only)	1 Set

Passport Work Item: HPSCHD114

Locations:

- Kit 1D - Radwaste Building, 487′ elevation, Men's Locker Room
- Kit 2D - Radwaste Building, 487′ elevation, Women's Locker Room
- Kit 3D - Yakima Building, 441′ elevation, Emergency Equipment Area

Quarterly (and after use):

- Inventory contents and ensure minimum quantities are present.
- Verify expiration dates on chemicals will not be exceeded prior to next quarterly check.
- Check physical condition of cabinet contents and replace items, as necessary.
- Insert changes in procedure book and update all forms.

ITEMS IN/NEAR
FIRST AID KIT - TYPE A (SILVER BOX)

ITEM	MINIMUM
Clam Shell	1
Spider Strap	1
Emergency Life Saving Kit (set of airways)	1
Burnsheets	2
Ladder Splints	2
Ambulance Blankets	2
Disposable Obstetrical Kit	1
"SAM" Splints	2
Towels (Terry Cloth)	2
Ring Cutter	1
Stiff Neck Device (1 each in sizes - Noneck, Short, Regular, Tall)	4
Large Bio-Hazard Bag	1
Face Shield	3
Gown, Infection Control	2
Body Fluid Clean-up Kit	2
Stretcher	1

INSTRUCTIONS
FIRST AID KIT - TYPE A (SILVER BOX) (Cont.)

Passport Work Item: FPSYS108

Locations:

- Kit 1FA - 441′ elevation, Turbine Building Fire Brigade Station 1
- Kit 2FA - Building 62, Fire Brigade Station 2
- Kit 3FA - 501' elevation, Turbine Building Corridor

Monthly (and after use):

- Inventory contents and ensure minimum quantities are present
- Check physical condition of contents and replace items, as necessary

ITEMS IN/NEAR
FIRST AID KIT - TYPE B (TRAUMA KIT)

ITEM	MINIMUM
Extraction Scissor	2
Tweezers	1
Penlight	2
Multi-trauma Dressing	4
Surgical Gloves	5 pair
Face Shield	5
Adhesive Tape	2 rolls
Band-Aids	10
Triangular Bandage	12
Eye Pads	6
Cold Packs	2
4″ x 4″ Dressing	5
Blankets (Disposable)	2
CPR Micro-Shields/Pocket Mask	3
Oxygen Cylinder (with kit)	1
Air Passage BVM and V-Vac	1
Gauze, 4 or 5 inch rolls	10
Blood Pressure Kit	1
Stethoscope	1
Saline Solution	1 bottle
Burn Sheet	1
Bio-Hazard Bags	3
Instant Glucose	1 tube
Patient Information Sheet	5
Gown, Infection Control	2
Body Fluid Clean-up Kit	1

Attachment 5.1-4
Page 1 of 2

INSTRUCTIONS
FIRST AID KIT - TYPE B, TRAUMA (Cont.)

Passport Work Item: FPSYS108

Locations:

- Kit 1FB - 441′ elevation, Turbine Building, Fire Brigade Station 1
- Kit 2FB - Building 62, Fire Brigade Station 2
- Kit 3FB - 501' elevation, Turbine Building Corridor
- Kit 4FB - 467' elevation, Radwaste Control Room
- Kit 5FB - 441' elevation, Operations Staff Area
- Kit 6FB - 441' elevation, Cowlitz Building (bldg. 17) Lobby

Monthly (and after use):

- Inventory contents and ensure that minimum quantities are present.
- Check physical condition of contents and replace items, as necessary.
- Verify oxygen cylinder is full (needle in green band). If low, replace with a full one.
- Perform operational check on penlights, (if dim or not working and a disposable type, replace).

ITEMS IN/NEAR
EMERGENCY PROTECTIVE EQUIPMENT KIT (TSC)

ITEM	MINIMUM
Protective Clothing	10 sets
- Coveralls	
- Hoods/caps	
- Plastic Booties	
- Rubber Boots	
- Rubber Gloves	
- Glove Liners	
Respirators (particulate)	10, (2 small, 2 large)
Combination Filters (respirator)	20
Pocket Dosimeters	10
Dosimeter Charger	1
Duct Tape	1 roll
Masking Tape	1 roll
Area Radiation Monitor (ARM) (Located on TSC Equipment Cabinet)	1

Passport Work Item: HPSCHD6

Location:

- Technical Support Center

Monthly (and after use):

- Verify that the respirators have been inspected within the past month.
- Inventory contents and ensure minimum quantities are present.
- Perform operational checks
  - Dosimeter charger
  - Dosimeters (re-zero)
- Check physical condition of cabinet contents and replace items, as necessary
- Check the calibration due date on the ARM to ensure that the due date will not be exceeded prior to the next check. If so, change out the instrument for a recently calibrated one.

PLANT EMERGENCY ALERTING SIGNALS

Passport Work Item: OPSSCHED135

Location: Control Room

Monthly: (Required) Perform testing of te public address and building wide alarm system.

- Perform a demonstration of the Alerting Tone in accordance with PPM 2.9.5.

Attachment 5.1-6

ITEMS IN/NEAR
EMERGENCY PROTECTIVE EQUIPMENT KIT (OSC)

	ITEM	MINIMUM
	Protective Clothing:	
	Large	5
	XL	20
	XXL	10
	Gloves, size 8/9	35
	Totes:	
	Large	15
	XL	20
	Glove Liners	50
	Disposable Shoe Covers	50
	Skull Caps	35
	Hoods	35
	Paper PCs	1 box
	Plastic PCs	1 box
	Masking Tape	5 rolls
	Battery Powered Air Samplers	3
	2″ Filter Paper	1 box
	Scott Air Packs	4
*	Spare air cylinders, per each SCBA unit	1 hr
	CAM, AC Powered	1
	Silver Zeolite Cartridge	6
	Area Radiation Monitor	1

* Credit is allowed for spare cylinders at other staging locations on site to meet required inventory minimum quantities, provided that one hour spare air is available for all required inventory SCBA units.

Passport Work Item: HPSCHDOSCPCKIT

Location:

- Operations Support Center

Annually (and after use)

- Inventory contents and ensure minimum quantities are present.
- Replace all rubber protective clothing and masking tape.

Monthly (and after use)

- Inventory instrumentation and ensure minimum quantities are present.
- Verify the number of silver zeolite cartridges are available.
- Ensure expiration date of Silver Zeolite Cartridges will not be exceeded prior to the next quarterly check; however:
  - If contained in manufacturer's sealed bags, cartridges are good for ten years;
  - If contained in other than manufacturer's sealed bags, cartridges are good for one year.
  - Replace as required.
- Verify calibration dates will not be exceeded prior to the next monthly check, and after each use, on the following equipment: Replace as necessary.
  - Area Radiation Monitor
  - AMS-3 CAM
  - Battery Powered Air Sampler 1
  - Battery Powered Air Sampler 2
  - Battery Powered Air Sampler 3
- Perform operational checks on the following equipment:
  - Area Radiation Monitor
  - AMS-3 CAM
  - Battery Powered Air Sampler 1
  - Battery Powered Air Sampler 2
  - Battery Powered Air Sampler 3

EOF/ENOC EMERGENCY EQUIPMENT

5.2-1 Field Sampling Kit

5.2-2 Protective Clothing Kit

5.2-3 Air Sampling Kit

5.2-4 Instrumentation Kit

5.2-5 Decon Cabinet

5.2-6 Extra Protective Clothing

5.2-7 River Evacuation Monitoring Kit

5.2-8 River Evacuation Decontamination Kit

5.2-9 Decon Storage Area

5.2-10 Equipment for PASS

Attachment 5.2

ITEMS IN/NEAR
FIELD SAMPLING KIT

ITEM	MINIMUM
Case for Equipment	1
Plastic Bags (assorted)	60
Cubitainers (1 gallon)	15
Rubber Gloves	4 pair
Digging Tools (small)	3
Felt Tip Marker (permanent)	4
Note Pads (3x5)	3
Pens (black)	3
Masking Tape (2″)	1 roll
Cutting Shears	1
Rubber Bands	1 box
Paper Towels	1 pkg.
Disposable Gloves	2 boxes
Smears and Holders	100
Radiation Signs	3
Barricade Tape	1 roll
Pocket Knife	1
Syphon Pump	1

Passport Work Items: FIELD SAMPLE KIT 1FS
FIELD SAMPLE KIT 2FS
FIELD SAMPLE KIT 3FS
FIELD SAMPLE KIT 4FS

Locations:

- Kit 1FS - Field Team Cabinet Number 1, Kootenai Building Health Physics Center
- Kit 2FS - Field Team Cabinet Number 2, Kootenai Building Health Physics Center
- Kit 3FS - Field Team Cabinet Number 3, Kootenai Building Health Physics Center
- Kit 4FS - ENOC, Cabinet Number 4, MPF, 1st Floor, Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents and minimum quantities are present.
- Check physical condition of contents and replace, as necessary.

ITEMS IN/NEAR
PROTECTIVE CLOTHING KIT

ITEM	MINIMUM
Case for Equipment	1
Hoods	3
Coveralls	3
Rubber Gloves	3 pair
Rubber Boots	3 pair
Masking Tape (2")	2 rolls
Rain Suits	3
Razor and Shaving Cream	1 set
Plastic Bags	Assorted
Skull caps	3
Cotton glove liners	1 pkg.

INSTRUCTIONS
PROTECTIVE CLOTHING KIT (Cont.)

Passport Work Items: PC KIT 1PC
PC KIT 2PC
PC KIT 3PC
PC KIT 4PC

Locations:

- Kit 1PC - Field Team Cabinet Number 1, Kootenai Building Health Physics Center
- Kit 2PC - Field Team Cabinet Number 2, Kootenai Building Health Physics Center
- Kit 3PC - Field Team Cabinet Number 3, Kootenai Building Health Physics Center
- Kit 4PC - ENOC, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary.

ITEMS IN/NEAR
AIR SAMPLING KIT

ITEM	MINIMUM
Case for Equipment	1
Portable Air Sampler	1
Model H809C Air Sampler Manual	1
Paper Filters	25
Note Pads (3x5)	3
Pens (Black)	3
Charcoal Cartridges	6
Tweezers	1
Silver Zeolite Cartridges	6
Spare Fuse	1
Stopwatch	1
Alligator Forceps	1

Passport Work Items: AIR SAMPLE KIT 1AS
AIR SAMPLE KIT 2AS
AIR SAMPLE KIT 3AS
AIR SAMPLE KIT 4AS

Locations:

- Kit 1AS - Field Team Cabinet Number 1, Kootenai Building Health Physics Center
- Kit 2AS - Field Team Cabinet Number 2, Kootenai Building Health Physics Center
- Kit 3AS - Field Team Cabinet Number 3, Kootenai Building Health Physics Center
- Kit 4AS - ENOC, Cabinet Number 4, MPF, 1st Floor, Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary .
- Verify air sampler calibration date will not be exceeded prior to the next quarterly check. Replace with a fresh calibrated air sampler as needed.
- Start-up air sampler.
- Perform operational check of stopwatch.
- Ensure expiration date of Silver Zeolite Cartridges will not be exceeded prior to the next quarterly check; however:
  - If contained in manufacturer's sealed bags, cartridges are good for ten years;
  - If contained in other than manufacturer's sealed bags, cartridges are good for one year.
  - Replace as required.
- Verify charcoal packets are sealed and if not sealed, replace.

ITEMS IN/NEAR
INSTRUMENTATION KIT

	ITEM	MINIMUM
	Case for Equipment	1
	Low Range Dose Rate Meter (MicroR)	1
	High Range Dose Rate Meter (Ion Chamber)	1
	Count Rate Meter (w/G-M Pancake Probe)	1
	Portable Radio (located in radio cabinet)	2
	Radio battery (1 in kit, 1 in radio cabinet)	2
++	Check Source Cs-137	1
	KI Tablets	2 bottles
	Calculator	1
	D-Cell Batteries	8
	9-Volt Batteries	4
	Note Pads (3x5)	3
	Pens (black)	3
	Battery Lantern (D - Cell)	1
	Flashlight	1
	Wood Stakes, Survey Markers (In Cabinet)	10
	First Aid Kit (In Cabinet)	1

++ Source is stored in a shielded container (pig) in the radio storage cabinet

Passport Work Items: QTRLY INST KIT 1IK
QTRLY INST KIT 2IK
QTRLY INST KIT 3IK
QTRLY INST KIT 4IK

PTL Item: Radio Checks, R149793

Locations:

- Kit 1IK - Field Team Cabinet Number 1, Kootenai Building Health Physics Center
- Kit 2IK - Field Team Cabinet Number 2, Kootenai Building Health Physics Center
- Kit 3IK - Field Team Cabinet Number 3, Kootenai Building Health Physics Center
- Kit 4IK - ENOC, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (and if used or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary.
- Ensure portable instrument calibration dates will not be exceeded prior to the next quarterly check. Replace with fresh calibrated instruments as needed.
- Perform operational checks:
    - Portable instruments (battery check)
    - Calculator
    - Battery lantern
    - Flashlight
- Ensure expiration dates will not be exceeded prior to the next quarterly check:
    - Iodine tablets
- Inventory field team radio batteries and check operability.

ITEMS IN/NEAR DECON CABINET

ITEM	MINIMUM
Skin/Clothing Contamination Report (968-24080)	20
Clip board	1
Red markers	1
Black markers	5
Ink pens	3
3″ x 5″ note pads	3
Smears	1,000
Masking tape	1 roll
Cotton tip applicators	2,000
Yellow magenta tape	1
Bottles Pax-land soap	2
Scrubbing sponges	2
Lava soap	1
Ivory soap	2
Soft scrub brushes	2
Moist towelettes	200
4″ x 4″ gauze sponges	200
3″ x 3″ gauze sponges	300
Scissors	1
Paper towels	500
Blank signs	5
Paper coveralls	6
Rubber gloves	6 pr
Plastic booties	20 pr
Count Rate Meter (w/Alpha Probe)	1
Count Rate Meter (w/G-M Pancake Probe)	1
Yellow plastic bags	20
Clear plastic bags	20
Extra soap	2
Kim Wipe Tissue	1 box
Small Disposable Cups	1 box
Saline Solution	1 bottle
++Camera, Polaroid (Mod. Impulse) with film	1
Tape Recorder, Dictaphone (Mod. 1252)	1

++ Ensure film has not exceeded its expiration date

Attachment 5.2-5
Page 1 of 2

Passport Work Item: DECON CABINET

Location:

- DC - Emergency Cabinet Number 14, Kootenai Building Health Physics Decon Shower Area

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check, and replace as needed:
  - Portable instrument
  - Chemicals
- Perform operational check on portable instruments (battery check).

ITEMS IN/NEAR
EXTRA PROTECTIVE CLOTHING

ITEM	MINIMUM
Case for Equipment	1
Coveralls	25
Plastic Shoe Covers	20 Pairs
Disposable Gloves	1 Box
Rubber Gloves	5 Pair
Hoods	12
Masking Tape	5 Rolls
Rubber Boots	2 Pair

INSTRUCTIONS
EXTRA PROTECTIVE CLOTHING (Cont.)

Passport Work Items: EXTRA PC KIT 1XP
QTRLY CHK PC KIT 2XP

Location:

- Kit 1XP - Emergency Cabinet Number 6, Kootenai Building Health Physics Center
- Kit 2XP - Emergency Cabinet Number 6, Kootenai Building Health Physics Center

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary.

ITEMS IN/NEAR
RIVER EVACUATION MONITORING KIT

	ITEM		MINIMUM
	Dosimeter Charger		1
	Pocket Dosimeter:		
	0-5 R		3
	0-500 mR		3
	High Range Dose Rate Meter (Ion Chamber)		1
	Low Range Dose Rate Meter (microR)		1
++	Check Source		1
	KI Tablets		2 bottles
	Coveralls		3 pair
	Hoods		3
	Shoe covers		3 pair
	Rubber gloves		3
	Surgical gloves		1 box
	Rain suits		3
	Tape, masking		1 roll
	Pens		5
	Portable Radio	1	1
	Radio headset		1
	Writing Tablet		1
	Personnel Exposure Record		5
	Emergency Response Log (968-23895)		1 Pad

++ Source is stored in a shielded container (pig).

Attachment 5.2-7
Page 1 of 2

INSTRUCTIONS
RIVER EVACUATION MONITORING KIT (Cont.)

Passport Work Item: RIVER EVAC MON KIT

Location:

- Kit 1RM - Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (or after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check and replace as needed:
  - Potassium Iodide (KI) tablets
  - Dose rate meter
- Perform operational checks:
  - Portable instrument (battery check)
  - Dosimeter charger
  - Radio

ITEMS IN/NEAR
RIVER EVACUATION DECONTAMINATION KIT

	ITEM	MINIMUM
	Dosimeter Charger	1
	Pocket Dosimeter:	
	0-5 R	2
	0-500 mR	2
	Bucket (in Cabinet)	1
	Sponges	5
	Soap	2
	Toweling, disposable	10
	Ribbon, Rad. Barrier	2 rolls
	Signs, Rad. Warning w/inserts	4
	Coveralls	2
	Hoods	2
	Shoe covers	2 pair
	Rubber gloves	2 pair
	Surgical gloves	1 box
	Rain suits	3
	Tape	1 roll
	Plastic bags (50 gal. yellow)	2
	Count Rate Meter	
	(w/G-M Pancake Probe)	1
++	Check Source	1
	Portable Radio	1
	KI Tablets	2 bottles
	Pens	5

++ Source is stored in a shielded container (pig).

INSTRUCTIONS
RIVER EVACUATION DECONTAMINATION KIT (Cont.)

Passport Work Item: RIVER EVAC DECON KIT

Location:

- Kit 1RD - Emergency Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary. If otherwise in good condition, it is not necessary to open sealed containers to count individual items.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check and replace as needed:
  - Portable instruments
  - Potassium Iodide (KI) tablets
- Perform operational checks:
  - Portable instrument (battery check)
  - Dosimeter charger
  - Radio

ITEMS IN/NEAR
DECON STORAGE AREA

ITEM	MINIMUM
Stanchions	20
Rad. Rope spools	2
Rad. signs w/asst. inserts	20
Coveralls	4 cases
Protective clothing	20 sets
Rubber boots	10 pair
Rain suits	25
Plastic booties (yellow)	1 case
Totes (shoe covers)	100 pair
Rubber gloves	100 pair
Cotton glove liners	200 pair
Surgical gloves	5 boxes
Duct tape	20 rolls
Check source	1
Count Rate Meter (w/GM Pancake Probe)	1
Extra Probes/cables	3
High Range Dose Rate Meter (Ion Chamber)	1
Liquid soap	1 case
Granular hand soap	5 lbs
Cotton applicators	1 box
Envelopes (3″ x 5″)	1 box
Surgical scrub brushes	20
Smears	2 boxes
Plastic bags (50 gal., yellow)	2 rolls
Plastic bags (12″ x 24″, yellow)	1 roll
KI Tablets	3 containers
Sponges	50
Buckets	6
Toweling	2 cases
Blankets	24
Collapsible water containers (1 gal)	5
Dosimeter Charger (with spare battery)	1
Vacuum Cleaners (12 volt)	3
Step off pads	2
Ground Cover	1
Pocket Dosimeter (0-500 mR)	4
Legal pads	1 box
Pens	2 boxes
Clipboards	5
Emergency Response Log (968-23895)	1 pad

Passport Activity: DECON SUPPLIES

Location:

- MPF Room 1-208A

Quarterly (and after use or if seal not intact):

- Inventory contents and ensure required quantities are correct.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check and replace as needed:
  - Portable instruments
  - Chemicals
  - Iodine Tablets
- Perform operational checks:
  - Portable instrument (battery check)
  - Dosimeter charger

EQUIPMENT FOR PASS

Passport Work Item: EOF EQUIPMENT PASS

Locations:			MINIMUM
Hoist - Crane	-	(Ambulance Bay)	1
Ramp	-	(Counting Room)	1
Handle for Cask	-	(Counting Room)	1
Tongs	-	(Chemistry Lab)	2
Syringes and Needles	-	(Chemistry Lab)	4
Serum Bottles	-	(Chemistry Lab)	4
pH Meter Probe	-	(Chemistry Lab)	1

Quarterly:

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace, as necessary

Attachment 5.2-10

CONTENTS

HOSPITAL RADIOLOGICAL EMERGENCY KIT

ITEM	MINIMUM
Action Cards Set	1
Body Outline Sketches	5
Clipboard	1
Marking Pens	2
Masking Tape (2″) Rolls	2
Paper or Plastic Floor Covering Kit	1
Paper Pads (Note Pads)	2
Pencils and/or Pens	6
Plastic (cover Air Inlets and equipment)	Assorted
Radiation Control Signs	5
Radiation Rope	Assorted
Radiation Tags	5
Radiation Tape	1 Roll
Scissor	1
Smears and Envelopes	25
Count Rate Meter (w/G-M Pancake Probe)	1
Dose Rate Meter	1
TLDs (Includes 1 Control TLD)	7
Decontamination Kit	1
-Bulb Syringe	
-Ivory Soap	
-Hand Brush	
-Lava Soap	
-Potassium Permanganate	
Protective Clothing Sets	6
-Coveralls	
-Hood	
-Shoe Covers	
-Surgeon Gloves & Masks	
-Plastic Bags	

INSTRUCTIONS

HOSPITAL RADIOLOGICAL EMERGENCY KIT

PTL Items : KADLEC EMERGENCY KIT, R 153967
KENNEWICK EMERGENCY KIT, R 153968
LOURDES EMERGENCY KIT, R 153969

Locations:

- Kit 1HK - Kadlec Medical Center Emergency Room Storage Cabinet
- Kit 2HK - Kennewick General Hospital Emergency Room Entrance Area
- Kit 3HK - Our Lady of Lourdes Hospital Nuclear Medicine Area

Quarterly (and after each use):

- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace items, as needed.
- Ensure calibration or expiration dates will not be exceeded prior to the next check, and replace or update as needed:
  - TLDs
  - Portable Instruments
- Verify that all action cards are the current revision.

EMERGENCY PLANNER COMMUNICATIONS SYSTEM TESTS

Passport Work Item: NRC PHONE TESTING

PTL Items: OFFSITE COMM DRILL, R144288
PHONE LIST, R 153960

Monthly: (Required)

- Perform test (by two-way communication) of the following dedicated telephone lines:

  1. Crash System - establish ring-down and two-way communications satisfactorily between the Security Communications Center (SCC) and:

     a. Control Room
     b. State of Washington
     c. Benton County
     d. Franklin County
     e. Department of Energy - Hanford Operations

  2. NRC Off-Site Emergency Notification System (ENS) - establish two-way communications satisfactorily between the USNRC Operations Center and:

     a. Control Room
     b. Technical Support Center (TSC)
     c. Emergency Operations Facility (EOF)

  3. NRC Health Physics Network (HPN);
     Reactor Safety Counterpart Link (RSCL);
     Protective Measures Counterpart Link (PMCL); and
     Management Counterpart Link (MCL) - establish these two-way communications satisfactorily at the:

     a. Control Room
     b. Technical Support Center (TSC)
     c. Emergency Operations Facility (EOF)

     NOTE: Report unsatisfactory test results on Items 2 and 3 to the NRC Operations Center, via standard telephone using the numbers provided in the Emergency Phone Directory.

- Verify backup meteorological sources are available per PPM 13.8.1.

Quarterly:

- Verify accuracy of Emergency Phone Directory. Revise and reissue, as needed.

Attachment 5.4

COMMUNICATIONS SYSTEM TESTS

Passport Work Items:

EMERG.FAX TEST
SIREN POLLING TEST
EXCLUSION AREA SIREN
SIREN WNP-1
SIREN W-1, task 01
SIREN W-1, task 02
RINGDOWN TEST
CRASH NETWORK
DEDICATED DIALUPS
DEDICATED PIO
OPSSCHD135
EOF RADIOS
OSC RADIO BATTERIES
EOF RADIOS
RADIO CONTROLLERS

PTL Items:

ERDS Test, R 150208
Pager Test, R 153965
Data Circuits, R 153956

A. Facsimile Network (Required)

Locations:

- Control Room
- Technical Support System
- Security Communications Center (SCC)
- Emergency Operations Facility
- Joint Information Center
- State of Washington Emergency Operations Center
- Benton County Emergency Operations Center
- Franklin County Emergency Operations Center
- Department of Energy-Richland (DOE-RL)

Monthly:

- Perform operational check of the facsimile transmission network by two-way transmission.

B. Siren System (Required)

Frequency	Siren	Test
Bi-weekly	W-1(Crossroads)	This test is performed remotely from the Kootenai Building. The test is initiated via the LARSE Master Terminal Unit (MTU) in the Communications Office (CO). The Remote Terminal Unit (RTU) will answer back to the MTU. Reference: TSI 6.2.25, Crossroads Siren Polling Test (W-1)
Bi-weekly	SRN-1 SRN-2 (WNP-1 Sirens)	This is a full activation test initiated from the Security Communications Center (SCC). Upon verification of siren activation, the sirens are reset by personnel at the remote location. Reference: TSI 6.2.26, Bi-Weekly WNP-1Siren Remote Control Test
Bi-weekly	D-1, D-2, D-3, D-4, D-5, D-6, D-7, D-8, D-10, D-11, D-12	This tests the operability of the siren radio repeaters and individual siren site radios. In addition, it queries the siren sites for battery status. A Si Test is also performed that verifies the operability of the amplifiers and drivers (the Si Test sends an 20 kHz tone on the system). Reference: TSI 6.2.32, Bi-Weekly Emergency Response River Siren Polling Test
Semi-annually	W-1 (Crossroads)	This test is an activation test initiated from the SCC. This test is performed with the amplifiers transferred to a load bank at the W-1 siren. The speakers are read with an ohm meter to verify proper resistance. Reference: TSI 6.2.23, Crossroads (W-1) Siren and Battery Load Test and Remote Activation.
Annually	W-1 (Crossroads), SRN-1, SRN-2, D-1, D-2, D-3, D-4, D-5, D-6, D-7, D-8, D-10, D-11, D-12	This is a full activation test of the River Alerting System and Exclusion Area Evacuation System. Reference: TSI 6.2.22

C. Dedicated Telephone Systems (Required)

Monthly:

- Test all lines of the following:

  - Emergency Response Crash System
  - Emergency Response Dial-up System
  - Emergency Response Ring-down System

Quarterly:

- Test all lines of the following:

  - Emergency Response Public Information Officer Network

D. Data Circuits (Required)

Quarterly

- Check status of data circuits between Energy Northwest facilities by ensuring terminals in the TSC and EOF are accessing plant data. {3.4}

- Perform ERDS testing. Refer to EPI-15.

E. Field Team Radios (Required)

Monthly

- Perform operational check on portable radios and batteries.

Annually:

- Check per FCC requirements.

G. Fire Brigade Team Equipment (Required)

Monthly:

- Perform operational checks on portable radios (OSC).

Annually:

- Perform operational FCC checks on portable radios (OSC).

H. Communication Consoles (Required)

Locations:

- 1CC - Security Communications Center (1)
- 2CC - Central Alarm Station (1)
- 3CC - Secondary Alarm Station (1)
- 4CC - EOF Logistics Area (3)

Monthly:

- Perform operational check (by two-way transmission) on all channels.

I. Pagers (Required)

Quarterly:

- Perform pager activation test/notification drill. Refer to EPI-19.

J. Auto Dialer (Required)

Quarterly:

- Perform pager activation test/notification drill. Refer to EPI-19.

K. Radio Controllers (Required)

Locations:

- DOE Safety, Station 51- Dose Assessment
- Field Monitoring, KNBG 237 - Dose Assessment
- LERN Channel, KOM 785 - Logistics Area
- Security Area Wide Channel, KZI 509 - Logistics Area
- TSC1 - Technical Support Center
- TSC2 - Technical Support Center
- RSD1 - Remote Shutdown Room
- OSC1 - Operations Support Center

Monthly

- Perform two-way transmission check on all channels.

NURSE'S STATION MEDICAL EQUIPMENT AND SUPPLIES

ITEMS IN/NEAR

Supplies:

	Minimum
Alcohol Pads	1 box
Betadine Pads	1 box
4x4 gauze sponges	1 box
CPR Barriers	1
Assorted sizes of Band-Aids	1 box
Blood Pressure Cuffs	2
Stethoscopes	2
Sterile Water	1 bottle
Assorted sizes of Bandage Tape	1 box
Cotton Balls	1 box
Tubular Elastic Dressings	1 box
Convenience Bags	1
Infection Control Clean-up Kit	1
Cotton Tipped Applicators	1 box
ACE Wraps	2
O2 Masks with tubing	2
Airways	6
Trauma Dressing	2
Burn Sheet	1
Obstetric Kit	1
Oxygen Cylinder	1
Gloves	1 box
Hydrogen Peroxide	1
Hot/cold Packs	1 box
Gauze, 4 or 5 inch rolls	5
Topical antibiotic ointment	2 tubes

NURSE'S STATION MEDICAL EQUIPMENT AND SUPPLIES (Cont.)

PTL Item: R-161201

Quarterly (and after major use):

- Verify oxygen cylinder full (needle is the green band). If low, replace with full one.
- Check oxygen regulator.
- Inventory contents and ensure minimum quantities are present.
- Check physical condition of contents and replace items, as necessary.
- Ensure expiration/calibration dates of equipment/supplies will not be exceeded prior to next quarterly check.
- Perform operational checks as appropriate.

EMERGENCY CENTER EQUIPMENT AND SUPPLIES

5.7-1	Instructions Emergency Centers
5.7-2	Control Room Inventory List
5.7-3	Technical Support Center Inventory List
5.7-4	Operations Support Center Inventory List
5.7-5	Emergency Operations Facility Inventory List
5.7-6	Alternate EOF Inventory List
5.7-7	Security Communications Center Inventory List
5.7-8	Joint Information Center Inventory List

Attachment 5.7

INSTRUCTIONS

EMERGENCY CENTERS

Quarterly:

- Perform inventory and ensure minimum quantities are present.
- When performing the EOF inventory, take the Global Position System (GPS) units outside and turn them on to refresh the memory. Turn the power off when done.
- Check material condition of center contents and housekeeping condition. Correct as necessary.
- Verify potassium iodide (if present) will not exceed expiration date prior to next quarterly check.
- Perform operational checks on center contents as appropriate to ensure all listed equipment is functional.
- Arrange replacement of missing items, as necessary.
- Check the calibration dates on the electronic dosimeters will not be exceeded before the next inventory activity.

NOTE: No equipment inventory is established for an Alternate OSC because its location will be determined by plant conditions. Therefore, the person in charge at the OSC and support personnel that are requested to staff the Alternate OSC will need to determine what equipment should be relocated from the primary OSC to the Alternate OSC location.

CONTROL ROOM

Passport Work Item: OPSSCHD164

INVENTORY LIST

Item		MINIMUM
Columbia Generating Station Emergency Plan (Shift Manager's Office)		1
Emergency Plan Implementing Procedures (Vol. 13) (One in MCR, one in Shift Manager's Office)		2 Sets
Technical Support Guidelines (TSG) (Six binders in Shift Managers Office)		1 Set
Emergency Phone Directory (One in Shift Manager's Office, one in CRS Desk)		2
Potassium Iodide Bottles (Shift Manager's Desk)		50 Bottles
Facsimile Machine		1
Ink Cartridge HP51626A		2
SCOTT SCBA		6
*Spare Cylinders per each unit		1 hr.
FORMS:		
968-24075	Classification Notification Forms	1 pad
968-26022	After Action Report Forms	1 pad
968-23895	Emergency Response Log	1 pad
968-25665	Event Notification Worksheet, NRC Form 361	1 pad
968-26045	Emergency Classification or Other Emergency Message (pink)	1 pad
968-26051	Exclusion Area Evacuation Message (yellow)	1 pad
968-26050	Protected Area Evacuation Message (green)	1 pad
968-26048	Localized Evacuation Message (blue)	1 pad
968-26098	Follow-up Offsite Notification	1 pad
968-25810	Emergency Director Turnover Sheet	1 pad
968-26171	Manpower Schedule Message	1 pad
968-25831	10 Mile EPZ Dose Projection & Data Map	1 pad
968-25918	Plant Status	1 pad

* Staged 501' TG west

Attachment 5.7-2

TECHNICAL SUPPORT CENTER

PTL Item: TSC Inventory, R 153961

INVENTORY LIST

Item	MINIMUM
Printer/Plotter Device (HP DeskJet 1600C)	1
Schematic Printer (D-Scan)	
Aperture Card Reader/Printer	1
+Emergency Response Data System (ERDS) User's Manual	1
Emergency Equipment Cabinet Key Box Mounted on Side of Cabinet (Key is there and glass front is intact)	1
Sign in Board	1
Ten-Mile Emergency Planning/Plume Zone Map	2
Washington State Road Atlas	1
Protective Action Recommendation Flow Charts	1 Set
Site Map	1
Clock (24 hour display)	1
Electronic White Boards (Plant Status, Significant Events)	2
IBM Dose Projection PC with Monitor	1
Laserjet Printer	1
Full set of EOPs	1
EAL Matrix from PPM 13.1.1 (full size)	1
EAL Matrix from PPM 13.1.1 (half size)	1
Emergency Classification/Protective Action Status Board	1
System Description Manuals	1 set
FAX Machine	1
INPO Resources Manual	1
Emergency Phone Directories	4
Cordless PA Microphone	2
Columbia Generating Station Emergency Plan	1
Containers of Miscellaneous Office Supplies (pens, pencils, tape, markers, staplers, etc.)	As Needed
Individual Position Baskets, As Required for designated positions	
• Pad of paper	1
• Pad of Emergency Response Log Forms	1
• Position Badge	1
• Miscellaneous Office Supplies (pens, pencils, etc.)	As Needed

+ Custodian is Administrative Services.

TECHNICAL SUPPORT CENTER

INVENTORY LIST (Cont.)

Item	MINIMUM
Scientific Calculator	2
Individual Position Specific Procedures for the Following:	
TSC Manager	1
TSC Technical Manager	1
Operations Manager	1
Radiation Protection Manager	1
Maintenance Manager	1
Administrative Services Manager	1
TSC Admin Support	1
Plant/NRC Liaison	1
Information Coordinator	1
Chemistry/Effluent Manager	1
TSC Manager Secretary	1
KI tablets	25 packages
Technical Support Guidelines (TSG)	1 set

FORMS:

968-24075	Classification Notification Form	1 pad
968-25665	Emergency Notification Worksheet	1 pad
968-26045	Emergency Classification or Other Emergency Message (pink)	1 pad
968-26051	Exclusion Area Evacuation Message (yellow)	1 pad
968-26050	Protected Area Evacuation Message (green)	1 pad
968-26048	Localized Evacuation Message (blue)	1 pad
968-26093	Team Tracker Log	1 pad
968-25810	Emergency Director Turnover Sheet	1 pad
968-25860	TSC Briefing Guide	1 pad
968-23895	Emergency Response Log	1 pad
968-25560	Repair Team Brief/Debriefing	1 pad
968-26072	After Action Report	1 pad
968-26098	Follow-up Offsite Notification	1 pad
968-26094	Emergency Manpower Schedule	1 pad
968-26171	Manpower Schedule Message	1 pad
968-26062	TSC Staffing Chart	1 pad
968-26063	OSC Staffing Chart	1 pad
968-25691	Accountability Log	1 pad

OPERATIONS SUPPORT CENTER

PTL Item: OSC Inventory, R 153962

INVENTORY LIST

Item	MINIMUM
Columbia Generating Station Emergency Plan	1
Emergency Plan Implementing Procedures (Vol. 13)	1 Set
Emergency Phone Directory	2
Shielding Evaluation Report	1
Sign in Board	1
Plant Status Board	1
OSC Team Locator Tiles	1
Electronic White Board	1
Site Map	1
Clock (24 hour display)	1
After Action Report Forms	25
Radio - Base Station	1
Radio - Portable	6
HP Radiation Exposure Records, Reports of Training and Medical Records	1 Set
+Complete Set of EWD Drawings	1 Set
+Set of AED Top Tier Drawings	1 Set
Battery - Powered Razor	1
KI Tablets	25 packages
Individual Position Specific Procedures for the Following:	
OSC Manager	1
HP Lead	1
Craft Lead, Mechanical	1
Craft Lead, I&C	1
Craft Lead, Electrical	1
Team Tracker	1
Containers of Miscellaneous Office Supplies (pens, pencils, tape, markers, staplers, etc.)	As Needed
Individual Position Baskets, as required for designated positions	
• Pad of paper	1
• Pad of Emergency Response Log Forms	1
• Position Badge	1
• Miscellaneous Office Supplies (pens, pencils, etc.)	As Needed

FORMS:

968-23895	Emergency Response Log	1 pad
968-26072	After Action Report	1 pad
968-25560	Repair Team Brief/Debriefing	4 pads
968-26063	OSC Staffing Chart	1 pad
968-25691	Accountability Log	1 pad
968-25698	OSC Team Tracker Log	1 pad
968-26062	TSC Staffing Chart	1 pad
968-26093	Team Tracking Log	1 pad

+ Maintained also as part of Clearance Order Review Committee (CORC) files.

Attachment 5.7-4

EMERGENCY OPERATIONS FACILITY

PTL Item: EOF Inventory, R 153964

INVENTORY LIST

Item	MINIMUM
Columbia Generating Station Emergency Plan:	
Emergency Operations Area	1
Dose Assessment Area	1
Oregon Columbia Generating Station/Hanford Emergency Response Plan	1
Emergency Plan Implementing Procedures: (Vol. 13)	3 Sets
Emergency Operations Area	
Dose Assessment Area	
Emergency Phone Directory:	6
Emergency Operations Area	
Dose Assessment Area	
Logistical Support Area	
INPO Emergency Resources Manual	1
NRC Telephone Directory	1
Washington State Road Atlas	2
Sign in Boards	1 Set
System Description Manual	1 Set
Ten-Mile Emergency Planning Plume Zone Map	1
Fifty-Mile Emergency Planning Ingestion Zone Map	1
Electronic White Board	1
Plant Status Board (Electronic White Board)	1
Protective Action Checklists (SAE & GE)/PAR Flow Charts	1 Set
Station Cutaway Poster	1
Clock (24 hour display)	2
Individual Position Signs	As required
Binder Containing Maps of Local Areas	1
Information Coordinator Remote Headset	1
Cordless Phone	2
Containers of Miscellaneous Office Supplies (pens, pencils, tape, markers, staplers, etc.)	As Needed
Individual Position Baskets, as required for designated positions	
• Pad of paper	1
• Pad of Emergency Response Log Forms	1
• Position Badge	1
• Miscellaneous Office Supplies (pens, pencils, etc.)	As Needed
Benton County Emergency Plan	1 Set
Franklin County Radiological Emergency Response:	
Energy Northwest	1 Set
Washington State Emergency Plan	1
FEMA Manual for Guidance on Offsite Emergency Radiation Measurement Systems	1
Area Radiation Monitor (Victoreen)	1

+ Includes required quantities.

EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Cont.)

Item	MINIMUM
LAN Laser Printer	1
Overhead Projector	1
Dose Projection PCs	3
KI Tablets	75 packages
EDPS User's Manual	1
State Response Procedures for Radiation Emergencies	1
Plant 2 Plume Exposure Pathway Field Team Map Booklets	4
Plant 2 50 Mile Ingestion Exposure EPZ Map	1
Evacuation Route/Assistance Center Map	1
Tri-Cities Map	2
SAE/GE Radiological EAL Chart	1
PPM 13.1.1 Wall Chart	1
Columbia Generating Station Site Map	1
Plume EPZ Field Team Display Map	1
Plant 2 Vicinity Map	1
Radio Console with Microphone (DOE Safety and Field Team) 2	2
Radio Console (Weather Station Monitor)	1
Radio Dispatch Headset (with push-to-talk clip-on adapters, in cabinet)	2
GPS Units	3
Packets containing Applicable Field Team Operating Procedures and Forms	6 ++
- 10 mile and 50 mile EPZ Map Books	1 in each Field Team Packet
- Clipboard with Tablet	1 in each Field Team Packet
- Emergency Response Log (968-23895)	1 in each Field Team Packet

++ (3 packets in MUDAC cabinet; 3 packets at the MPF cabinet outside room 201)

EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Cont.)

Item	MINIMUM
Individual Volume 13 Procedures for the Following: EOF Manager Assistant EOF Manager Radiological Emergency Manager Dose Projection HP Engineering Manager (includes PPM 9.3.22) Offsite Agency Coordinator Site Support Manager Security Manager EOF PIO EOF Manager's Secretary	1
Cordless PA Microphone	1
Audio Link Headsets for Crash Phone	10
Technical Support Guidelines (TSG)	1 Set
Electronic Dosimeters, in "Enter" mode	12

FORMS:

968-24075	Classification Notification Form	1 pad
968-25665	Emergency Notification Worksheet	1 pad
968-26045	Emergency Classification or Other Emergency Message (pink)	1 pad
968-26051	Exclusion Area Evacuation Message (yellow)	1 pad
968-26050	Protected Area Evacuation Message (green)	1 pad
968-26048	Localized Evacuation Message (blue)	1 pad
968-26097	Field Team Radiation Survey	1 pad
968-25815	Field Team Dispatch and Dosimetry Worksheet	1 pad
968-26098	Follow-up Offsite Notification	1 pad
968-26028	EOF Briefing Guide	1 pad
968-25810	Emergency Director Turnover Sheet	1 pad
968-23895	Emergency Response Log	1 pad
968-26022	After Action Report	1 pad
968-26171	Manpower Schedule Message	1 pad
968-26094	Emergency Manpower Schedule	1 pad
968-26061	EOF Staffing Chart	1 pad
968-25975	Intermediate Phase Duties Checklist	1 pad
968-26148	Drill, Exercise or Actual Events Opportunity Evaluation	1 pad

ALTERNATE EOF INVENTORY LIST

PTL Item: Alternate EOF Inventory, R 156869

INVENTORY LIST

Item	MINIMUM
WASH DOH State Response Procedures for Radiation Emergencies	1
Plant 2 Plume Exposure Pathway Field Team Map Booklet	1
Benton County Emergency Response Plan	1
Franklin Country Emergency Response: Energy Northwest	1
WASH. DEM Comprehensive Emergency Management Plan	1
Technical Support Guidelines (TSG)	1 Set
EAL Tables 3 & 4 Chart	1
PPM 13.1.1 Wall Chart	1
SAE Protective Action Checklist	1
GE Protective Action Checklist	1
Offsite PAR Flow Chart	1
Meteorological and Plume Data Status Board	1
Plume EPZ Map with Lat./Long.	1
Fifty Mile Emergency Planning Zone Map with Lat./Long.	1
Emergency Phone Directories	4

FORMS:

968-24075	Classification Notification Form	1 pad
968-25665	Emergency Notification Worksheet	1 pad
968-26045	Emergency Classification or Other Emergency Message (pink)	1 pad
968-26051	Exclusion Area Evacuation Message (yellow)	1 pad
968-26050	Protected Area Evacuation Message (green)	1 pad
968-26048	Localized Evacuation Message (blue)	1 pad
968-26097	Field Team Radiation Survey	1 pad
968-25815	Field Team Dispatch and Dosimetry Worksheet	1 pad
968-26098	Follow-up Offsite Notification	1 pad
968-26028	EOF Briefing Guide	1 pad
968-25810	Emergency Director Turnover Sheet	1 pad
968-23895	Emergency Response Log	1 pad
968-26022	After Action Report	1 pad
968-26171	Manpower Schedule Message	1 pad
968-26094	Emergency Manpower Schedule	1 pad
968-26061	EOF Staffing Chart	1 pad
968-25975	Intermediate Phase Duties Checklist	1 pad
968-26148	Drill, Exercise or Actual Events Opportunity Evaluation	1 pad

SECURITY COMMUNICATIONS CENTER

PTL Item: SCC Inventory (PAAP) R144290

INVENTORY LIST

Item	MINIMUM
EPIP Position Book	1 Book
Emergency Phone Directory	1
KI Tablets	6 packages
FORMS:	
Classification Notification Forms (968-24075)	1 pad
After Action Report Forms	1 pad
Emergency Response Log (968-23895)	1 pad

Attachment 5.7-7

JOINT INFORMATION CENTER

PTL Item: JIC Equipment, R 153963

INVENTORY LIST

Item		MINIMUM
Columbia Generating Station Emergency Plan		1
Emergency Plan Implementing Procedures		1 Set
Emergency Phone Directory		4
Columbia Generating Station Systems Manuals (9 Volumes)		1 Set
Media Information Packages		15
Slides Representing Plant Systems (in Auditorium Projection Booth)		1 Set
Clock		3
TV Monitor (broadcast)		2
AM-FM Receiver		1
Headphones		2
EBS Radio Monitor		2
Fifty-Mile Emergency Planning Ingestion Zone Map		1
Ten-Mile Emergency Planning Plume Zone Map		1
Evacuation Route/Assistance Center Map		3
Phone Team Resource Books		10
Office Supplies		++
FORMS:		
968-24075	Classification Notification Form	1 pad
968-26057	Emergency Phone Response Log	1 pad
968-23895	Emergency Response Log	1 pad
968-26058	Distribution Team Document Log	1 pad
968-26072	After Action Report	1 pad
968-25918	Plant Status	1 pad
jicbriefgid.doc	JIC Briefing Guidance	1

+ Includes required quantities.
++ Per posted inventory on cabinet, Room 1-222

Attachment 5.7-8

VENTILATION RADIATION MONITORING

Passport Work Item: EOF HVAC TESTING

Location:

- Emergency Operations Facility (EOF)

Quarterly

- Perform radiological check of HVAC in accordance with HPI 7.45 with assistance from Facilities personnel for verification.
- Completed work order packages should be forwarded to Records Processing.

Attachment 5.8

Passport Work Items: AMACFT52TT
OFMA HF 1H (MWO 00KD42)
OFMA HF 1C (MWO 00KD40)
EOF HVAC TESTING
HDQTRS AND EOF DG
HDQTRS & EOF DG, QTR

A. HVAC

Location:

- Emergency Operations Facility (EOF)

Quarterly

- Perform electrical check of HVAC in accordance with manufacturer's specifications.
- Verify radiological check with assistance from HP Operations personnel.
- Completed work packages should be forwarded to Records Processing.

B. 18 Months

- Perform Carbon and HEPA DOP tests for the applicable EOF and TSC units.

C. Diesel Generators (Required)

Locations:

- ENOC
- Kootenai/PSF/Emergency Operations Facility (EOF)
- Deschutes/Plant Engineering Facility

Monthly

- Perform load test of diesel generators in accordance with manufacturer's specifications.

Quarterly

- Verify operation of transfer switch in accordance with manufacturer's specifications.

EMERGENCY RESPONSE DATA SYSTEM (ERDS)

Data Point Library Reference

EPN	TDAS	
APRM-CH-A	X194	{3.5} { 3.6}
CMS-H2E-1301/CMS-CP-1301	X471	
CMS-LT-6A	X354	
CMS-02E-1302/CMS-CP-1302	X456	
CMS-PT-5	X442	
PRM-LCRM-1C	X392	
CMS-RIS-27E	X432	
CMS-SUM-1	X118	
COND-LT-40A	X434	
COND-LT-40B	X373	
EDR-SQRT-37	X181	
FDR-SQRT-38	X167	
HPCS-FT-5	X122	
IRM-EMSQ-601A	X184	
LPCS-FT-3	X164	
MS-LT-26A	X130	
RFW-CRM-L104	X159	
MS-PT-51A	X151	
MS-RIS-610A	X169	
OG-RIS-601A	X088	
RCIC-FT-3	X142	
RFW-DPT-17	X327	
RFW-FT-802A	X149	
RFW-FT-802B	X135	
RHR-FT-15A	X163	
RHR-FT-15B	X043	
RHR-FT-15C	X058	
SPTM-SUM-1	X355	
SRM-EMSQ-600A	X296	

The following computer points have the instrument loop listed.

EPN	SIGNAL	COMPUTER POINT	
MET-TE-10A MET-TE-11A	Average Temp - 245' Average Temp - 33'	F146AV	{3.5} {3.6}
MET-WMON-1A	Average Wind Speed - 245' Average Wind Speed - 245'	F142AV F143AV	
MET-WMON-2A	Average Wind Speed - 33' Average Wind Dir. - 33'	F144AV F145AV	

Roadblock/Sweeper Kit Inventory

PTL Item: R186980

Item	Minimum
Orange Safety Vest	1
Safety Goggles	1
Flashlight	1
SPIP-SEC-03 (current revision)	1
Site One Vehicle Gate Key (2CA-11)	1
Gate 167 Key (HP Site 4, C Van Storage area)	1
Clipboard and Tablet	1
Dust Masks	10
Evacuation Route Maps	750 (approximately)*

- 750 sheets of 20 lb paper is equivalent to approximately 1.75 inches. This quantity may be estimated using this guide.

Attachment 5.11

13.5.7