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DATE: July 20, 2000

TO: Distribution

FROM: *U. DeLeon*
Procedure Control, Administrative Services, WNP-2 (927A)

SUBJECT: **WNP-2 PLANT PROCEDURES MANUAL - VOLUME 13
PACKAGE NO. 2000-336**

REFERENCE:

The following Procedure(s) have been revised/approved and are to be inserted in your controlled copy of the Manual and the superseded revisions are to be removed and destroyed:

<u>Procedure</u>	<u>Rev.</u>	<u>Title</u>
13.8.11	20	EMERGENCY DOSE PROJECTION SYSTEM OPERATIONS
13.10.2	16	TSC MANAGER DUTIES
13.11.1	22	EOF MANAGER DUTIES
13.11.7	20	RADIOLGICAL EMERGENCY MANANGER DUTIES
13.14.4	32	EMERGENCY EQUIPMENT

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USE CURRENT REVISION

COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER *13.8.1	APPROVED BY PJI - Revision 20	DATE 07/20/00
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION OFFSITE DOSE CALCULATIONS		
TITLE EMERGENCY DOSE PROJECTION SYSTEM OPERATIONS		

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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)
- 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

{R1594}

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.

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- 3.4 EDPS (Plume) - The EDPS Plume model accepts only a constant wind speed, direction and stability class 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 for WNP-2 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 1 to 7 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 μ R or more at 1.2 miles from the plant.

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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 the appropriate password:

- TSC: USERID = TSC Password = TSC1
- EOF: USERID = EOF Password = EOF1

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.

- JIC: USERID = JIC1 Password = JIC1

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 RSTAT 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.

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- 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 RSTAT 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.
 - 3) The default flow rate will display for the option chosen. Actual values will need to be entered.
 - 4) Enter the monitor reading.

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- 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 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.

- 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, contact PNNL or National Weather Service (NWS) using 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.

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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 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

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Reactor Shutdown Time and Start of Release to Environment, which are entered on the EVENT TIMES screen.

- c. Ensure that WNP-2 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 WNP-2 station.
- 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 TDAS 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.

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5.0 ATTACHMENTS

5.1 EDPS User Guidance

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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

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- 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 WNP-2 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.
- e. The Monitoring Data screen lists the Plant Monitors used to calculate a release. Readings for all monitors listed are normally available on RSTAT 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.

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- 2) When a Stack Monitor is selected, a screen will be displayed requesting Standby Gas Treatment System (SGT) information. This can be obtained through RSTAT. If the Filter Intact option is selected, the Filter Efficiency is 99.7%. If the Damaged option is selected, EDPS uses 0% efficiency.
 - 3) The default flow rate will display for the option chosen, however, this should be obtained from RSTAT. If two trains are running, add the flow rates together prior to entry.
 - 4) Enter the monitor reading based on RSTAT 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.

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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.

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- 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, contact the PNNL Weather Forecaster or National Weather Service Forecaster using 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.

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- j. Enter WNP-2 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). If the ΔT or stability class is not available contact the PNNL Weather Forecaster or National Weather Service Forecaster to obtain Atmospheric Stability as described in step 2.2.4.k.3).
- 1) To determine Stability Class: Obtain necessary ΔT from the RSTAT 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 ($^{\circ}\text{F}/212 \text{ ft}$)		
Stability Classification	NRC Categories Stability	Temperature Change With Height ($^{\circ}\text{F}/212 \text{ ft}$)
Extremely unstable	A (1)	$\Delta T \leq -2.22$
Moderately unstable	B (2)	$-2.22 < \Delta T \leq -1.98$
Slightly unstable	C (3)	$-1.98 < \Delta T \leq -1.75$
Neutral	D (4)	$-1.75 < \Delta T \leq -.58$
Slightly stable	E (5)	$-.58 < \Delta T \leq 1.75$
Moderately stable	F (6)	$1.75 < \Delta T \leq 4.67$
Extremely stable	G (7)	$4.67 < \Delta T$

- 2) If the ΔT is not available, use the sigma theta available on RSTAT.

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Stability Class vs. Sigma Theta Signal		
Stability Classification	NRC Categories (Stability)	(Degrees)
Extremely unstable	<i>A (1)</i>	$\text{sigma theta} \geq 22.5$
Moderately unstable	<i>B (2)</i>	$22.5 \geq \text{sigma theta} > 17.5$
Slightly unstable	<i>C (3)</i>	$17.5 \geq \text{sigma theta} > 12.5$
Neutral	<i>D (4)</i>	$12.5 \geq \text{sigma theta} > 7.5$
Slightly stable	<i>E (5)</i>	$7.5 \geq \text{sigma theta} > 3.8$
Moderately stable	<i>F (6)</i>	$3.8 \geq \text{sigma theta} > 2.1$
Extremely stable	<i>G (7)</i>	$2.1 \geq \text{sigma theta}$

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

- PNNL Weather Forecaster (Primary) 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.

- Hanford Site Weather Page:
<http://terrassa.pnl.gov:2080/HMS/stamap.htm>
On the Hanford Site Map, click on Station 9 (FFTF) and select data for the 10 meter tower information.
- Telephone the National Weather Service Forecaster (Secondary) 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 National Weather Service does not provide a temperature differential. The NWS will describe the stability category as neutral, moderately stable, etc.

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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

The following table displays a stability classification based on °C/100 meters. This chart may be needed when requesting a ΔT from offsite.

Stability Class vs. Temperature Change With Height (°C/100 m)		
Stability Classification	NRC Categories (Stability)	Temperature Change With Height (°C/100 m)
Extremely unstable	<i>A (1)</i>	$\Delta T \leq -1.9$
Moderately unstable	<i>B (2)</i>	$-1.9 < \Delta T \leq -1.7$
Slightly unstable	<i>C (3)</i>	$-1.7 < \Delta T \leq -1.5$
Neutral	<i>D (4)</i>	$-1.5 < \Delta T \leq -0.5$
Slightly stable	<i>E (5)</i>	$-0.5 < \Delta T \leq 1.5$
Moderately stable	<i>F (6)</i>	$1.5 < \Delta T \leq 4.0$
Extremely stable	<i>G (7)</i>	$4.0 < \Delta T$

- l. Wind Dir (Wind Direction) - enter direction from which wind is blowing. Data point is normally available on RSTAT.
- m. Wind Spd (Wind Speed) - enter wind speed in miles per hour (mph). Data point is normally available on RSTAT.
- 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 Select MODEL DOMAIN button on EDPS Main Window

- 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.

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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

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- 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.

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- 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 the projected Plume boundary, select 1.00 E -04 (100 micro r) only.
- 4) During the ingestion phase, manual contour lines may be entered to project the 500 μ R (relocation boundary), 20 μ R and 2 μ R (food control boundary). To select the correct value, enter the following:
 - 5e-4 for 500 μ R
 - 2e-5 for 20 μ R
 - 2e-6 for 2 μ R
 - 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.

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- 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.

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- 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

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- 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 of this attachment to continue entering data.(a)(b)(c)

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USE CURRENT REVISION

WNP-2
PLANT PROCEDURES MANUAL

PROCEDURE NUMBER *13.10.2	APPROVED BY DWC - Revision 16	DATE 07/20/00
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION PLANT EMERGENCY FACILITIES		
TITLE TSC MANAGER DUTIES		

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1.0 PURPOSE

This procedure provides instructions for the duties and responsibilities of the Technical Support Center (TSC) Manager during declared emergencies.

2.0 REFERENCES

- 2.1 FSAR, Chapter 13.3, Emergency Plan, Section 2
- 2.2 10CFR50, Appendix E (IV)(A) {R-5695, R-5708}
- 2.3 WNP-2 Safeguards Contingency Plan
- 2.4 PPM 1.3.1, WNP-2 Operating Policies, Programs, and Practices
- 2.5 PPM 5.7.1, Severe Accident Guidelines
- 2.6 PPM 13.1.1, Classifying the Emergency
- 2.7 PPM 13.2.1, Emergency Exposure Levels/Protective Action Guides
- 2.8 PPM 13.2.2, Determining Protective Action Recommendations
- 2.9 PPM 13.4.1, Emergency Notifications
- 2.10 PPM 13.5.3, Evacuation of Exclusion Area and/or Nearby Facilities
- 2.11 PPM 13.13.2, Emergency Event Termination and Recovery Operations
- 2.12 PPM 13.13.3, Intermediate Phase MUDAC Operations
- 2.13 PPM 13.13.4, After Action Reporting
- 2.14 Classification Notification Form, 968-24075
- 2.15 Emergency Director Turnover Sheet, 968-25810
- 2.16 Emergency Response Log, 968-23895
- 2.17 Technical Support Briefing Guidelines, 968-25860
- 2.18 Emergency Classification or Other Emergency Message, 968-26045

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3.0 DISCUSSION

- 3.1 The Emergency Director (ED) is the Energy Northwest individual on shift at all times who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions. {R-5708}
- 3.2 The WNP-2 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 TSC Manager is responsible for the plant management function during an emergency and will be in charge of directing plant activities in support of Control Room operations. The TSC Manager has the authority to implement any plant action deemed necessary to mitigate the emergency conditions. {R-5695}
- 3.4 Severe Accident Guidelines (SAGs) are entered and Emergency Operating Procedures (EOPs) exited when primary containment flooding is required. An announcement to the TSC and EOF should be made when this occurs.
- 3.5 The TSC Manager is responsible to ensure communications are maintained as necessary between the Shift Manager and EOF Manager/Emergency Director. The TSC Manager should also maintain an awareness of plant conditions and obtain concurrence of the Emergency Director prior to implementing mitigating actions identified as requiring Emergency Director concurrence on EOPs or SAGs.

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4.0 PROCEDURE

NOTE: Once emergency operations commence and EPIPs are entered, normal work control practices may be superseded by EPIP repair team methodology at the TSC Manager's discretion. Consideration should be given to the severity of the emergency when making this decision.

NOTE: Procedural steps may be implemented using Attachment 5.2, TSC Manager Checklist.

4.1 TSC Manager Duties At Unusual Event Classification

No action required unless you are contacted by the Shift Manager or Emergency Director.

4.2 TSC Manager Duties For Alert Or Higher Classifications

- 4.2.1 Obtain an electronic dosimeter from HP Access Control. Direct all others in the TSC to obtain appropriate dosimetry (DRD or PIC).
- 4.2.2 Respond to the TSC, present your badge to the personnel accountability keycard reader, start and maintain an Emergency Response Log, and contact the Shift Manager for an initial briefing on the current status of the emergency, status of offsite notifications, and any known or anticipated plant hazardous areas.
- 4.2.3 If, after obtaining the initial Plant status briefing from the Shift Manager, the EOF Manager is not yet present, contact the JIC Manager to provide status information for the first followup news release.
- 4.2.4 Instruct responding TSC staff to promptly setup the TSC and obtain assistance if necessary to resolve any activation problems.

NOTE: You may assume the ED duties prior to TSC activation, but ensure you have sufficient personnel and communication links to assess accident conditions and communicate classification decisions or PARs to offsite authorities.

- 4.2.5 Assume the ED duties from the Shift Manager as per Section 4.3, unless the EOF Manager is prepared to assume, or has already assumed, these duties.
- 4.2.6 Make announcements to arriving TSC staff that you have assumed the ED duties.

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4.2.7 Direct the Plant Admin Manager to contact a qualified TSC Manager on the ERO list to respond as Assistant TSC Manager, if needed.

NOTE: Activation of the TSC without all the required positions staffed may be declared, however, recognize that failure to staff the required positions within one hour of classification is a violation of the Emergency Plan response requirements.

4.2.8 Monitor the progress of TSC activation and staff activities and declare the TSC activated when the following minimum staffing positions are present:

- TSC Manager
- Radiation Protection Manager (RPM)
- Operations Manager
- Plant/NRC Liaison
- Technical Manager
- Core/Thermal Hydraulics Engineer
- Mechanical Engineer
- Electrical Engineer

OR

4.2.9 Declare the TSC activated when the main responsibilities of the TSC can be assumed, even though the positions listed above are not all present.

TSC Main Responsibilities

- a. Provide plant management and technical support to plant operations personnel during emergency conditions.
- b. Relieve reactor operators of peripheral duties and communications not directly related to reactor system manipulations.
- c. Ensure ERDS is activated by checking with Plant/NRC Liaison.
- d. If the EOF is not activated, the TSC is also responsible for:
 - Managing the overall Energy Northwest emergency effort
 - Evaluating the magnitude and consequences of actual or potential radiological releases
 - Assessing plant conditions and determining appropriate emergency classifications

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- Coordinating emergency response activities with local, state and federal agencies and providing offsite PARs

NOTE: The TSC Manager may use judgment in determining when qualified personnel will perform a task to fulfill TSC responsibilities even though the personnel may not be identified as normally assigned to the task; e.g., a knowledgeable person could perform the function of the Plant/NRC Liaison until additional personnel arrive.

- 4.2.10 Have the TSC Information Coordinator announce activation to the other emergency centers and have the Plant/NRC Liaison report it to NRC.
- 4.2.11 Conduct an initial status briefing to TSC staff on turnover information obtained from the Control Room that includes:
 - Current emergency classification, cause of event and corrective actions being taken or in-progress
 - Current plant status, i.e., operating, shutdown, reduced power, etc.
 - Onsite personnel status of injuries, contaminations, exposures, etc.
 - If event involves radioactive releases
 - Status of notifications to offsite agencies
 - Status of offsite emergency response activities in progress or planned and PARs if issued
- 4.2.12 If the event involves a security contingency, direct the Plant Administrative Manager request a Security lead come to the TSC to act as Security Liaison, and determine if access security needs to be established for the TSC.
- 4.2.13 Provide update briefing on the status of planned and anticipated TSC actions to the EOF Manager.
- 4.2.14 Ensure TSC technical, maintenance, operations and radiation protection personnel are assessing plant conditions and conferring collectively to provide you with accident mitigation conclusions and recommendations to determine decisions on:
 - Changes to Emergency Classification or PARs
 - Preventative or corrective actions that need to be pursued or deferred
 - Tasks that need to be pursued
 - Radiological or other hazards that impact plant emergency workers

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- Need to request augmenting staff or offsite assistance
- Evacuation actions for plant personnel

4.2.15 When EAL or PAR changes are identified, notify the EOF Manager.

4.2.16 Direct that plant PA announcements of Emergency Classification changes or cautions to emergency workers about plant hazardous areas are made per steps on Form 968-26045, Emergency Classification or Other Emergency Message.

NOTE: Tasks of an immediate nature should be prefaced by the term "urgent". The Shift Manager has the authority to determine if a task is urgent. The Shift Manager also has final authority in determining the priority of urgent tasks if multiple urgent tasks exist and a question is raised as to which has priority.

4.2.17 Ensure that the Operations Manager, Technical Manager, Maintenance Manager, Radiation Protection Manager, Shift Manager and OSC Manager coordinate the repair team actions necessary to place and maintain the Plant in a stable condition.

4.2.18 If the RPM advises you of TSC radiological airborne activity problems, consider having the Control Room initiate HVAC isolation actions for the TSC specified in PPM 4.10.3.1.

4.2.19 If the emergency worker dose limit is projected to exceed 5 REM over the course of the event for TSC staff, confer with TSC staff and determine if selected staff will be directed to continue emergency duties from the Control Room, the EOF, or be evacuated offsite.

4.2.20 For any potential scenario that could pose a threat to emergency response center activation and personnel safety, confer with the Security Lieutenant to determine:

- Appropriate areas for TSC and OSC operations
- Avenues of safe access
- Communications abilities
- The ability of Security to keep the area safe

4.2.21 If you are 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.

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

4.2.22 Conduct periodic update briefings of TSC staff. Refer to Technical Support Center (TSC) Briefing Guidelines (Form 968-25860) located in the TSC.

4.2.23 Direct that an announcement be made to the TSC and EOF when EOPs are exited and SAGs are entered.

4.2.24 Obtain Emergency Director concurrence using the Emergency Director ringdown phone prior to implementing mitigating actions identified as requiring Emergency Director concurrence on EOPS or SAGs.

4.2.25 When plant stability is achieved, confer with the EOF Manager and consider event termination or recovery actions in accordance with PPM 13.13.2.

4.2.26 At event termination or shift change direct an after action critique of TSC performance to summarize actions taken and identify corrective actions needed.

4.2.27 At termination of an Alert or higher emergency classification, serve as a standing member of the Final After Action Report Committee in accordance with PPM 13.13.4. If the emergency does not go beyond Unusual Event, Emergency Preparedness will compile a Final After Action Report.

4.3 Transfer Of Emergency Director Duties

4.3.1 If assuming the Emergency Director duties:

a. Contact the Shift Manager and determine a time when conditions permit the turnover process.

NOTE: The Classification Notification Form (Form 968-24075), or the Emergency Director Turnover Sheet (Form 968-25810), can be used as a guide during the turnover process.

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

c. Once current conditions and proposed actions are fully understood, relieve the Shift Manager of Emergency Director duties.

d. Announce the transfer of authority to the facility staff and ensure the other WNP-2 emergency facilities are notified.

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- e. Initiate a CRASH conference call to notify the offsite agencies of the transfer of Emergency Director duties. Direct the Plant/NRC Liaison to notify the NRC.
- f. Log the transfer in the Emergency Response Log.
- g. As Emergency Director, follow the guidance in Section 4.4.

4.3.2 If transferring the Emergency Director duties:

- a. When contacted by the EOF Manager, provide a time when conditions permit the turnover of the Emergency Director duties.

NOTE: The Classification Notification Form (Form 968-24075), or the Emergency Director Turnover Sheet (Form 968-25810), can be used as a guide during the turnover process.

- b. When conditions permit, contact the EOF Manager and conduct a turnover of Emergency Director duties that includes a discussion of the Plant status and emergency conditions.
- c. Once the EOF Manager 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 Emergency Response Log.

4.4 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.

4.4.1 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, Classifying The Emergency, 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.
- d. Requesting assistance from offsite organizations and agencies as needed.

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- e. Making followup notifications per PPM 13.4.1
- f. Approving the technical content of press releases.
- g. Ensuring, through the facility managers, that the appropriate emergency procedures are implemented.
- h. Ensuring the requisite emergency response facilities are activated and properly staffed.
- i. 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.

- j. Terminating the emergency and entering the recovery phase in accordance with PPM 13.13.2.

4.4.2 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 to invoke 10CFR 50.54(x) actions.

4.4.3 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 briefings using Technical Support Center (TSC) Briefing Guidelines (Form 968-25860).

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

- a. Complete a Classification Notification Form (CNF).

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

- b. Ensure notifications are performed in accordance with PPM 13.4.1, using the completed CNF as a basis.
 - c. Direct the Information Coordinator to inform the other WNP-2 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.
- 4.4.5 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 responding to an emergency response facility.
- 4.4.6 Consider Exclusion Area evacuation in accordance with PPM 13.5.3 when a Site Area Emergency is declared.
- 4.4.7 Implement an exclusion area evacuation at General Emergency unless conditions will not allow evacuation.
- 4.4.8 Authorize increases to emergency worker radiation exposure limits when recommended by the Radiation Protection Manager or Radiological Emergency Manager in accordance with PPM 13.2.1.
- 4.4.9 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 Duties of TSC Manager Secretary
- 5.2 TSC Manager Checklist

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Duties of: Technical Support Center Manager Secretary

Assignment Location: Technical Support Center

Report To: Technical Support Center Manager

Responsibilities:

1. Maintain a log of TSC Manager actions on a form similar to the Emergency Response Log (Form 968-23895) of significant events and activities involving the TSC Manager or Technical Support Center Operations with emphasis on:
 - a. Receipt of notifications of changes in emergency classification
 - b. The time and content of center briefings
 - c. Significant telephone conversations or Public Address announcements
 - d. Entries requested by TSC decision makers
 - e. Assignment of action items

2. When directed, initiate Crash Network calls for the TSC Manager to offsite agencies by:
 - a. Utilizing the Crash Network System Log located in the Emergency Phone Directory

NOTE: In the event of a Crash phone failure, refer to the Emergency Phone Directory section on Crash Calls for the alternate means of notification.
 - i. Initiate Crash call by dialing 400
 - ii. Perform a roll call of agencies contacted
 - (1) When initiating roll call inform responding parties to standby for a call from the Emergency Director
 - (2) Following completion of roll call indicate to the Emergency Director that parties are ready for the Crash call
 - (3) Note on Crash call log the time of call, message, and parties on line.

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3. When TSC Manager completes filling out the Classification Notification Form (CNF):
 - a. Make copy of original and provide copy to Admin Support for faxing and internal distribution.
 - b. Return original to TSC Manager prior to initiating Crash call notification.
4. Monitor incoming Crash calls and inform the TSC Manager of their content and note in log
5. Answer and monitor the TSC Manager's phones and record messages as necessary
6. Monitor the TSC Manager's checklist and notify him of actions required as necessary
7. Make briefing announcements to TSC members as directed
8. Perform other TSC administrative support duties as requested by the TSC Manager or Plant Administrative Manager.
9. Refer incoming media calls to the Joint Information Center.
10. Upon shift change:
 - a. Fully brief your relief on responsibilities, duties and the current status of work being performed.
 - b. Forward your log for review by the TSC Manager.
11. Upon shift change or termination of the emergency:
 - a. Prepare an individual After Action Report. Refer to PPM 13.13.4.
 - b. Provide support to TSC Manager as necessary in collating TSC Report or logs.
 - c. Deliver After Action Reports to the Plant Administrative Manager.

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TSC MANAGER CHECKLIST

	<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
4.1	<u>TSC Manager Duties At Unusual Event Classification</u>		
	1. No action is required unless contacted by the Shift Manager or Emergency Director.		
4.2	<u>TSC Manager Duties For Alert Or Higher Classifications</u>		
	1. Respond to TSC, present badge to the personnel accountability keycard reader and contact Shift Manager for a briefing on the current status, offsite notifications, and plant hazardous areas.	_____	_____
	2. Instruct staff to setup TSC and obtain assistance if problems arise.	_____	_____
	3. Assume ED duties from Shift Manager per Section 4.3, unless EOF Manager is prepared, or has already assumed, these duties.	_____	_____
	4. Contact JIC Manager if acting as Emergency Director and provide initial information.	_____	_____
	5. Make announcements to arriving TSC staff that you have assumed the ED duties.	_____	_____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
6. Contact a qualified TSC Manager on the ERO list to respond as Assistant TSC Manager, if needed.	_____	_____
7. Monitor progress of TSC activation and staff activities and declare the TSC activated when the minimum staffing positions are present.	_____	_____
OR		
8. Declare TSC activated when main responsibilities of TSC can be assumed, even though the following positions are not all present:	_____	_____
<ul style="list-style-type: none"> • TSC Manager • RPM • Operations Manager • Plant/NRC Liaison • Technical Manager • Core/Thermal Hydraulics • Mechanical Engineer • Electrical Engineer 		
9. Have TSC Information Coordinator announce activation to the other emergency centers and have the Plant/NRC Liaison report it to NRC.	_____	_____
10. Conduct initial status briefing to TSC staff on turnover information obtained from the Control Room.	_____	_____
11. If event involves a security contingency, direct the Plant Administrative Manager request a Security lead come to the TSC to act as Security Liaison, and determine if access security needs to be established for the TSC.	_____	_____
12. Provide update briefing on the status of planned and anticipated TSC actions to EOF Manager.	_____	_____
13. Ensure TSC technical, maintenance, operations and radiation protection personnel are assessing plant conditions and conferring collectively to provide you with accident mitigation conclusions and recommendations.	_____	_____
14. When EAL or PAR changes are identified, notify EOF Manager.	_____	_____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
15. Direct that plant PA announcements of Emergency Classification changes or cautions to emergency workers about plant hazardous areas are made in accordance per Form 968-26045 steps.	_____	_____
16. Ensure that the Operations Manager, Technical Manager, Maintenance Manager, Shift Manager, and OSC Manager coordinate repair team actions necessary to place and maintain Plant in a stable condition.	_____	_____
17. If the RPM advises you of TSC radiological airborne activity problems, consider having the Control Room initiate HVAC isolation actions for the TSC specified in PPM 4.10.3.1.	_____	_____
18. If habitability of TSC becomes questionable, confer with TSC staff and determine if selected staff will be directed to continue emergency duties from the Control Room, the EOF, or be evacuated offsite.	_____	_____
19. For security contingencies, confer with the Security Lieutenant to determine appropriate areas for TSC/OSC operations, safe routes, communications ability, and the ability of Security to keep the area safe.	_____	_____
20. If you are advised of a personnel injury or death, then:		
a. Ensure that transportation to a medical facility is being arranged and next-of-kin notifications occur using guidance found in PPM 1.9.14.	_____	_____
b. Ensure details of the incident, e.g., individual's name, type of injury, duties when injury occurred, etc., are forwarded to the JIC.	_____	_____
21. Conduct periodic update briefings of TSC staff. Refer to Technical Support Center (TSC) Briefing Guidelines (Form 968-25860) located in the TSC.	_____	_____
22. Direct the TSC Plant Administrative Manager to make a public address announcement when EOPs are exited and SAGs are entered.	_____	_____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
23. Obtain Emergency Director concurrence using the Emergency Director ringdown phone prior to implementing mitigating actions identified as requiring Emergency Director concurrence on EOPs or SAGs.	_____	_____
24. Direct that an announcement be made to the TSC and EOF when SAGs are entered and EOPs are exited.	_____	_____
25. When plant stability is achieved, confer with EOF Manager and consider event termination or recovery actions in accordance with PPM 13.13.2.	_____	_____
26. At event termination or shift change direct an after action critique of TSC performance to summarize actions taken and identify corrective actions needed.	_____	_____
27. At termination of an Alert or higher emergency classification, serve as a standing member of the Final After Action Report Committee in accordance with PPM 13.13.4.	_____	_____

4.3 Transfer Of Emergency Director Duties

1. If assuming the Emergency Director (ED) duties:
 - a. Contact the Shift Manager and determine a time when conditions permit turnover of Emergency Director duties. _____
 - b. At a time when conditions permit, conduct a turnover using Classification Notification Form or Emergency Director Turnover Sheet as a guide. _____
 - c. Once current conditions and proposed actions are fully understood, relieve the Shift Manager of Emergency Director duties. _____
 - d. Announce transfer of authority to facility staff and ensure other WNP-2 emergency facilities are notified. _____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
f. Log the transfer in the Emergency Response Log.	_____	_____
e. Initiate a Crash call to notify offsite agencies of the transfer to Emergency Director duties.	_____	_____
f. Log the transfer in the Emergency Response Log.	_____	_____
g. As ED, follow guidance in Section 4.4.	_____	_____
2. If transferring the ED duties:		
a. When contacted by the EOF Manager, provide a time when conditions permit the turnover of Emergency Director duties.	_____	_____
b. At the time when conditions permit, contact the EOF Manger and conduct a turnover using the Classification Notification Form or the Emergency Director Turnover Sheet as a guide.	_____	_____
c. Once the EOF Manager fully understands current conditions and proposed actions, transfer ED duties.	_____	_____
d. Announce the transfer to the facility staff.	_____	_____
e. Log the transfer in the Emergency Response Log.	_____	_____

4.4 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. | | |

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
<ul style="list-style-type: none"> c. Approving official notifications/communications to local, state, and Federal agencies. d. Requesting assistance from offsite organizations and agencies as needed. e. Making followup notifications per PPM 13.4.1 f. Approving the technical content of press releases. g. Ensuring, through facility managers, that appropriate emergency procedures are implemented. h. Ensuring the requisite emergency response facilities are activated and properly staffed. i. Authorizing venting of the primary containment when in SAGs. j. Terminating the emergency and entering the recovery phase per PPM 13.13.2. 		
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: <ul style="list-style-type: none"> 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. d. Conduct periodic briefings using the TSC Briefing Guidelines (Form 968-25860). 	_____	_____
4. When conditions warrant a change in emergency classification or protective action recommendations, perform the following: <ul style="list-style-type: none"> a. Complete a Classification Notification Form (CNF). b. Ensure notifications are performed per PPM 13.4.1 using the completed CNF as a basis. 	_____	_____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
c. Direct the Information Coordinator to inform the other WNP-2 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. Implement Protected Area evacuation per PPM 13.5.1 at Site Area Emergency, unless conditions will not allow evacuation.	_____	_____
6. Consider exclusion area evacuation per PPM 13.5.3 when a Site Area Emergency is declared.	_____	_____
7. Implement an Exclusion Area Evacuation at General Emergency unless conditions will not allow evacuation.		
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.	_____	_____

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ENERGY NORTHWEST

WNP-2 PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.11.1	PJI - Revision 22	07/20/00
VOLUME NAME		
EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION		
EMERGENCY OPERATIONS FACILITIES		
TITLE		
EOF MANAGER DUTIES		

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1.0 PURPOSE

This procedure describes the emergency responsibilities and duties of the Emergency Operations Facility (EOF) Manager. {R-5695, R-5708}

2.0 REFERENCES

- 2.1 GO2-83-529, Backup Emergency Operations Facilities (EOF) {2.1}
- 2.2 10CFR50 Appendix E (IV)(A) {R-5695, R-5708}
- 2.3 10CFR50.47 (b)(3) {R-1584}
- 2.4 FSAR, Chapter 13.3, Emergency Plan, Section 2 & 6
- 2.5 WNP-2 Safeguards Contingency Plan
- 2.6 PPM 1.3.1, WNP-2 Operating Policies, Programs and Practices
- 2.7 PPM 1.9.14, Onsite Medical Emergencies
- 2.8 PPM 5.7.1, Severe Accident Guidelines
- 2.9 PPM 13.1.1, Classifying the Emergency
- 2.10 PPM 13.2.1, Emergency Exposure Levels/Protective Action Guides
- 2.11 PPM 13.2.2, Determining Protective Action Recommendations
- 2.12 PPM 13.4.1, Emergency Notifications
- 2.13 PPM 13.5.3, Evacuation of Exclusion Area and/or Nearby Facilities
- 2.14 PPM 13.13.2, Emergency Event Termination and Recovery Operations
- 2.15 PPM 13.13.3, Intermediate Phase MUDAC Operations
- 2.16 PPM 13.13.4, After Action Reporting
- 2.17 Classification Notification Form, 968-24075.
- 2.18 Emergency Director Turnover Sheet, 968-25810.
- 2.19 Emergency Response Log, 968-23895.
- 2.20 Emergency Operations Facility Briefing Guidelines, 968-26028.
- 2.21 Follow-up Offsite Notifications, 968-26098

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3.0 DISCUSSION

- 3.1 The Emergency Director is the Energy Northwest individual on shift at all times who has the authority and responsibility to immediately and unilaterally initiate any emergency actions.
- 3.2 The Shift Manager normally acts as the Emergency Director when an emergency classification is initially declared. Emergency Director responsibilities will transfer from the Shift Manager to the TSC Manager or the EOF Manager depending upon time of facility activation.
- 3.3 The EOF Manager is responsible for the overall management of Energy Northwest resources and will be in charge of Energy Northwest emergency and recovery operations.
- 3.4 The EOF Manager must authorize requests for outside assistance, including resources available from the federal government.
- 3.5 Severe Accident Guidelines (SAGs) are entered and Emergency Operating Procedures (EOPs) are exited when primary containment flooding is required. The TSC Manager is responsible to communicate this to the EOF Manager or Assistant EOF Manager when this occurs.
- 3.6 The Emergency Director approves mitigating actions identified as requiring Emergency Director concurrence on SAGs or EOPs prior to implementation, using the Emergency Director ringdown phone, or other means if this method is not available.

4.0 PROCEDURE

NOTE: Procedural steps may be implemented using Attachment 5.2, EOF Manager Checklist.

4.1 EOF Manager Duties At Unusual Event Classification

- 4.1.1 No action is required unless you are contacted by the Shift Manager or Emergency Director.

4.2 EOF Manager Duties For Alert Or Higher Emergency Classifications

NOTE: If you are unable to respond to the EOF, respond to the Alternate EOF located at the Richland Office Complex.

- 4.2.1 Respond to the Emergency Operations Facility (EOF). Then,
 - a. Sign in on the staffing board
 - b. Obtain the EOF Manager basket and other equipment
 - c. Start an Emergency Response Log

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- 4.2.2 Contact the Emergency Director for a briefing on the status of the emergency and offsite notifications.
- 4.2.3 Contact the JIC Manager to provide status information for the follow-up news releases.
- 4.2.4 Verify responding EOF staff promptly set up the EOF and obtain assistance, if necessary, to resolve any activation problems.

NOTE: Failure to staff the required positions within one hour of classification is a violation of the Emergency Plan response requirements.

4.2.5 Ensure required EOF positions are being filled as specified:

- Radiological Emergency Manager
- Environmental Field Team Members (6)
- Field Team Coordinator
- Dose Projection Health Physicist
- Telecommunications Manager

OR

Use judgment in determining when qualified personnel will perform a task to fulfill EOF responsibilities even though the personnel may not be identified as normally assigned to the task.

NOTE: The EOF may be activated without all required positions filled.

4.2.6 Declare the EOF activated when the following main responsibilities of the EOF can be assumed.

EOF Main Responsibilities

- a. Manage the overall Energy Northwest emergency effort.
- b. Evaluate the magnitude and consequences of actual or potential radiological releases.
- c. Coordinate emergency response activities with local, state and federal agencies.

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d. Provide offsite protective action recommendations.

4.2.7 When the EOF is activated, then:

- a. Direct the EOF Information Coordinator to announce center activation to other emergency centers
- b. Direct the TSC Manager to have the Plant/NRC Liaison to report activation to NRC.
- c. Conduct an initial briefing, including:
 - Current emergency classification, cause of event and corrective actions being taken or in progress
 - Current plant status
 - Onsite personnel status of injuries, contaminations, exposures, etc.
 - Whether the event involves radioactive releases
 - Status of notifications to offsite agencies
 - Status of offsite emergency response activities in progress or planned and PARs if issued

4.2.8 Assume the Emergency Director duties per Section 4.6. Then:

- a. Initiate a Crash call per Section 4.6.
- b. Inform the SCC that the EOF Manager has assumed responsibility for Crash notifications.

4.2.9 Evaluate staff recommendations on assistance from outside agencies and direct the Site Support Manager to coordinate this response.

4.2.10 Conduct periodic briefings:

- a. If an NRC site response team is enroute, ensure a briefing in accordance with Attachment 5.1 is prepared. {R-1584}
- b. Conduct briefings for EOF staff approximately every 30 minutes using EOF Briefing Guidelines, form 968-26028.
- c. Brief the Chief Executive Officer/Representative as developments occur using form 968-26028.

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4.2.11 Ensure EOF staff are assessing plant conditions and conferring collectively to provide you with accident mitigation conclusions/recommendations to determine decisions on:

- Changes to Emergency Classification or PARs
- Prioritizing tasks that need to be pursued
- Radiological or other hazards that impact offsite emergency workers
- The need to request augmenting staff or offsite assistance
- Protective actions for plant/offsite personnel

4.2.12 Refer calls from the news media to the JIC.

4.2.13 If elevated radiological conditions exist within the EOF or outside the PSF/EOF:

EOF general area radiation levels exceed 5 mrem/hr

EOF unidentified airborne radioactivity exceeds 0.3 DAC (0.3 DAC equates to approximately 750 ccpm on a 40 ft³ air sample in the field):

Then:

- Immediately notify the EOF 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.

4.2.14 If airborne activity levels outside the PSF/EOF could exceed 50 mR/hr, direct the Radiological Emergency Manager to monitor the intake and return air monitors and to ensure that PSF/EOF ventilation is in the correct operating mode.

4.2.15 If the emergency worker dose limit is projected to exceed 5 REM over the course of the event for EOF staff, confer with EOF staff and determine if selected staff will be directed to continue emergency duties from the TSC or the alternate EOF.

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NOTE: The alternate EOF meets the functions of establishing required communications between the primary EOF and the TSC. It also serves as an assembly area for EOF responders unable to respond to the primary EOF due to hazards that prevent access to the primary facility from off site. {2.1}

- 4.2.16 If near site conditions present sufficient hazards to EOF responders that have not yet arrived at the primary EOF, direct Security road blocks to redirect EOF responders to the alternate EOF, located near the Joint Information Center at the Richland Office Complex. {2.1}
- 4.2.17 Ensure that mitigating action concurrence is obtained prior to implementing actions that require Emergency Director concurrence on EOPs or SAGs.
- 4.2.18 Terminate the event and initiate recovery operations via PPM 13.13.2 when appropriate.
- 4.2.19 Initiate ingestion zone operations per PPM 13.13.3 when appropriate. Coordinate the implementation through the Washington State Emergency Operations Center.
- 4.2.20 Determine staffing levels for the EOF and the JIC when the emergency is downgraded or terminated using PPM 13.13.2 guidelines.
- 4.2.21 At shift change or termination of emergency:
 - a. Brief your relief on the current status of the plant and emergency activities.
 - b. Prepare an individual After-Action Report. Refer to PPM 13.13.4.
 - c. At event termination, direct an after action critique of EOF performance to summarize actions taken and identify corrective actions needed.
 - d. Deliver EOF After-Action Reports and summary to the Final After Action Committee or to the Emergency Preparedness Department.
 - e. If an Alert or higher classification was declared, delegate a chairperson and establish a Final After Action Report Committee in accordance with PPM 13.13.4. If the emergency classification was Unusual Event, Emergency Preparedness will compile the report.

4.3 Specific Actions to Take at Site Area Emergency:

- Ensure notifications are completed to State, County, and DOE within 15 minutes.
- Evacuate the Protected Area per PPM 13.5.1.
- Ensure dose assessment is in progress if a release is in progress or containment leakage is suspected.

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- Ensure Security has established road blocks on plant access roads.
- Consider an Exclusion Area evacuation per PPM 13.5.3.
- Direct the TSC to make the appropriate PA announcements.

4.4 Specific Actions to Take at General Emergency:

- Ensure notifications are completed to State, County, and DOE within 15 minutes.
- Ensure the Protected Area is evacuated if not completed at Site Area Emergency per PPM 13.5.1.
- Ensure the Exclusion Area is evacuated per PPM 13.5.3.
- Direct the TSC to make the appropriate PA announcements.
- Ensure dose projections are updated.
- Ensure roadblocks are established and properly located to avoid the plume.
- Evaluate protective actions for emergency workers.
- Consult with the REM to determine wind direction and EOF habitability considerations.
- Review the PARs in PPM 13.2.2 to ensure that the PARs declared reflect current Plant or radiological conditions.
- Determine if additional PARs are required per PPM 13.2.2.

4.5 Specific Actions for the Ingestion Phase:

- Initiate ingestion zone operations via PPM 13.13.3 when appropriate. Coordinate with Washington State EOC.
- Determine staffing levels for the EOF and JIC when the emergency is downgraded or terminated using PPM 13.13.2.

4.6 Transfer Of Emergency Director Duties

1. If assuming the Emergency Director (ED) duties:
 - a. Contact current ED and determine a time when conditions would permit turnover process.
 - b. At a time when conditions permit, conduct a turnover using the Classification Notification Form or Emergency Director Turnover Sheet as a guide.

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- c. Once current conditions and proposed actions are fully understood, relieve current ED of duties.
 - d. Announce transfer of authority to facility staff and ensure other Energy Northwest emergency facilities are notified.
 - e. Complete a Crash call to offsite agencies, i.e., state, county, and DOE of the transfer. The Plant/NRC Liaison in the TSC should be directed to notify the NRC on the ENS line.
 - f. Log the transfer in the facility log.
 - g. As ED, follow guidance in Section 4.7.
2. 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.

4.7 Actions As Emergency Director

4.7.1 Assume the following responsibilities:

NOTE: The EOF Manager must authorize requests for outside assistance, including resources available from the federal government.

NOTE: Items a through e may not be delegated.

- a. Classification of emergencies in accordance with PPM 13.1.1, Classifying The Emergency, and periodically reviewing 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.

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- c. Approving official notifications/communications (e.g., Crash calls) to local, state, and Federal agencies.
- d. Authorizing recovery actions not specifically authorized by procedure which have a potential for radioactive release to the environment.
- e. Requesting assistance from offsite organizations and agencies as needed.
- f. Making followup notifications to offsite agencies per PPM 13.4.1. Refer to Follow-up Offsite Notifications, 968-26098.
- g. Approving the technical content of press releases.
- h. Ensuring, through the facility managers, that the appropriate emergency procedures are implemented.
- i. Ensuring the requisite emergency response facilities are activated and properly staffed.
- j. 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.
- k. 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.

- l. Terminating the emergency and entering the recovery phase in accordance with PPM 13.13.2.

4.7.2 If response to the event requires departure from Technical Specifications or license conditions, refer to PPM 1.3.1 to invoke 10CFR 50.54(x) actions.

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- 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 briefings using EOF Briefing Guidelines (968-26028).

- 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. Initiate a Crash call to provide notification per PPM 13.4.1, using the completed CNF as a basis.
 - If the Crash phone is out of service, the primary back up is the dial up system. To ensure completing notification within 15 minutes, contact the Benton and Franklin EOCs and the Washington State EOC prior to other notifications.
- c. Direct the Information Coordinator to inform the other Energy Northwest 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.

- 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.

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b. Site Area Emergency or 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 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.

4.7.7 Authorize increases to emergency worker radiation exposure limits when recommended by the Radiation Protection Manager or Radiological Emergency Manager in accordance with PPM 13.2.1.

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 NRC Response Team Briefing Guidelines

5.2 EOF Manager Checklist

5.3 EOF Manager Secretary Duties

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NRC RESPONSE TEAM BRIEFING GUIDELINES

1. Date and time of this status briefing: Date _____ Time _____
2. Current Classification (Check): _____ UE _____ Alert _____ SAE _____ GE _____
 Declared at: Date _____ Time _____
3. Reason for classification (include failed systems/components):

Previous classification history:

- a. Classification _____ declared at _____ for the following reason:
- b. Classification _____ declared at _____ for the following reason:
- c. Classification _____ declared at _____ for the following reason:
4. Offsite PARs and implementation status for current classification:
5. Affected plant parameters (attach copy of most recent Plant Status Board display):

Fuel cladding:	Intact	Challenged	Failed
RCS boundary:	Intact	Challenged	Failed
Containment Integrity:	Intact	Challenged	Failed
6. Prognosis (check): _____ Stable _____ Improving _____ Degrading _____ N/A

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7. Meteorological Data:

- a. Wind direction from _____(Degrees) b. Wind Speed _____(MPH)
- c. Stability class: (circle) A B C D E F G
- d. Precipitation (check): ___ None ___ Rain ___ Sleet ___ Snow

8. Offsite radiological conditions (check):

- ___ a. No release is involved.
- ___ b. Release is imminent.
- ___ c. Release is occurring. Release path:
- ___ d. Release started. Time:_____ Est. Duration:
- ___ e. Release occurred previously. Duration:
- ___ f. Release stopped. Time:_____ Date:
- ___ g. Release Inventory Isotopes Release Rate

Iodines	Ci/s
Noble gases	Ci/s
Airborne particulates	Ci/s
Liquid	Ci/s
Other	Ci/s

9. Current dose projections:

<u>Plume Centerline</u>	<u>Thyroid Dose Rate (CDE)</u>	<u>TEDE Dose Rate</u>
Site Boundary (1.2 miles)	mrem/hr	mrem/hr
2 miles	mrem/hr	mrem/hr
5 miles	mrem/hr	mrem/hr
10 miles	mrem/hr	mrem/hr

10. Onsite protective Actions:

- ___ a. Protected Area Evacuation. Status:
- ___ b. Exclusion Area Evacuation. Status:
- ___ c. KI recommended.
- ___ d. Restricted areas.

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11. Offsite agencies responding (check and list):

- ___a. Local:
- ___b. State:
- ___c. Federal:
- ___d. INPO Mutual Aid:
- ___e. Contractor/Vendor:

12. Current mitigation activities and their priority:

13. Security information:

14. Other information:

Emergency Center Status:

- TSC:
- OSC:
- EOF:
- JIC:

15. Additional Energy Northwest information sources:

<u>Information</u>	<u>Energy Northwest ERO Position</u>	<u>Location</u>
Offsite dose projections:	Radiological Emergency Mgr. (REM)	EOF
PARs & Field Team status:	REM	EOF
EOF habitability:	REM	EOF
Core damage assessment:	Engineering Manager	EOF
Containment status:	Engineering Manager	EOF
Plant equipment problems:	Technical Manager	TSC
Repair team status:	Maintenance Manager	TSC
Plant operations status:	Operations Manager	TSC
Onsite radiological status:	Radiation Protection Mgr. (RPM)	TSC
Security status:	Security Manager	EOF

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EOF MANAGER CHECKLIST

<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
4.1 <u>EOF Manager Duties At Unusual Event Classification</u>		
1. No action is required unless you are contacted by the Shift Manager or Emergency Director.		
4.2 <u>EOF Manager Duties For Alert Or Higher Classifications</u>		
<u>NOTE:</u> The numbers in parentheses correspond to the step in the body of this procedure.		
1. Contact JIC Manager and provide update for follow-up news release. (4.2.3)	_____	_____
2. Declare the center activated when minimum staffing positions are present. (4.2.6)	_____	_____
3. Have EOF Information Coordinator announce activation to the other emergency centers. Direct the TSC Manager have the Plant/NRC Liaison report it to NRC. (4.2.7)	_____	_____
4. Conduct initial status briefing and periodic followup briefings approximately every 30 minutes. (4.2.7.c)	_____	_____
5. Assume the Emergency Director (ED) duties per Section 4.6. Ensure that a Crash call to offsite agencies is completed upon transfer of ED duties. (4.2.8.a)	_____	_____
6. Inform the SCC that the EOF has assumed responsibility for Crash notification. (4.2.8.b)	_____	_____
7. If the Radiological Emergency Manager advises you of EOF airborne activity problems, verify the EOF emergency ventilation has been initiated. (Refer to step 4.2.13)	_____	_____
8. If habitability of EOF becomes questionable, confer with EOF staff and determine if selected staff will be directed to continue emergency duties from the TSC or be evacuated offsite. (4.2.13)	_____	_____

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
4.3 <u>Specific Actions to Take at Site Area Emergency: (4.3)</u>		
• Ensure notifications are completed to State, County, and DOE within 15 minutes.	_____	_____
• Evacuate the Protected Area per PPM 13.5.1.	_____	_____
• Ensure dose assessment is in progress if a release is in progress or containment leakage is suspected.	_____	_____
• Ensure Security has established road blocks on plant access roads.	_____	_____
• Consider an Exclusion Area evacuation per PPM 13.5.3.	_____	_____
• Direct the TSC to make the appropriate PA announcements.	_____	_____
4.4 <u>Specific Actions to Take at General Emergency: (4.4)</u>		
• Ensure notifications are completed to State, County, and DOE within 15 minutes.	_____	_____
• Ensure the Protected Area is evacuated if not completed at Site Area Emergency per PPM 13.5.1.	_____	_____
• Ensure the Exclusion Area is evacuated per PPM 13.5.3.	_____	_____
• Direct the TSC to make the appropriate PA announcements.	_____	_____
• Ensure dose projections are updated.	_____	_____
• Ensure roadblocks are established and properly located to avoid the plume.	_____	_____
• Evaluate protective actions for emergency workers.	_____	_____
• Consult with the REM to determine wind direction and EOF habitability considerations.	_____	_____
• Review the PARs in PPM 13.2.2 to ensure that the PARs declared reflect current Plant or radiological conditions.	_____	_____
• Determine if additional PARs are required per PPM 13.2.2.	_____	_____

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<u>Response Actions</u>	<u>Completed</u>	<u>Initials</u>
4.5 <u>Specific Actions for the Ingestion Phase: (4.5)</u>		
• Initiate ingestion zone operations via PPM 13.13.3 when appropriate. Coordinate with Washington State EOC.	_____	_____
• Determine staffing levels for the EOF and JIC when the emergency is downgraded or terminated using PPM 13.13.2.	_____	_____
4.6 <u>Transfer Of Emergency Director Duties (4.6)</u>		
1. If assuming the Emergency Director (ED) duties:		
a. Contact current ED and determine a time when conditions would permit turnover process.	_____	_____
b. At a time when conditions permit, conduct a turnover using the Classification Notification Form or Emergency Director Turnover Sheet as a guide.	_____	_____
c. Once current conditions and proposed actions are fully understood, relieve current ED of duties.	_____	_____
d. Announce transfer of authority to facility staff and ensure other Energy Northwest emergency facilities are notified.	_____	_____
e. Complete a Crash call to offsite agencies, i.e., state, county, and DOE of the transfer. The Plant/NRC Liaison in the TSC should be directed to notify the NRC on the ENS line.	_____	_____
f. Log the transfer in the facility log.	_____	_____
g. As ED, follow guidance in Section 4.7.	_____	_____
2. If transferring the ED duties:		
a. Conduct a turnover using the Classification Notification Form or the Emergency Director Turnover Sheet as a guide.	_____	_____
b. Transfer ED duties.	_____	_____
c. Announce the transfer to the facility staff.	_____	_____
d. Log the transfer in the facility log.	_____	_____

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Response Actions

Completed

Initials

4.7 Actions As Emergency Director (4.7)

Once EIPs 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. _____

NOTE: Items a through e cannot be delegated.
Items f through g may be delegated if desired.

- a. Classify emergencies per PPM 13.1.1 and periodically review the classification to ensure that it reflects current plant conditions.
- b. Make protective action recommendations per PPM 13.2.2 to offsite authorities responsible for implementing emergency measures for the public.
- c. Approve official notifications/communications to local, state, and Federal agencies.
- d. Authorize recovery actions not specifically authorized by procedures which have a potential for radioactive release to the environment.
- e. Request assistance from offsite organizations and agencies as needed.
- f. Make followup notifications to offsite agencies per PPM 13.4.1. Refer to Follow-up Offsite Notifications, 968-26098.
- g. Approve the technical content of press releases.
- h. Ensure, through facility managers, that appropriate emergency procedures are implemented.

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- i. Ensure the requisite emergency response facilities are activated and properly staffed.
- j. 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.
- k. Authorizing venting of the primary containment when in SAGs.
- l. Terminate the emergency and enter the recovery phase per PPM 13.13.2.
- 2. Refer to PPM 1.3.1 to invoke 10CFR 50.54(x) actions as necessary. (4.7.2) _____
- 3. Approximately every 30 minutes, or when conditions change, perform the following: (4.7.3) _____
 - 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.
 - d. Conduct briefings using the EOF Briefing Guidelines.
- 4. When conditions warrant a change in emergency classification or protective action recommendations, perform the following: (4.7.4) _____
 - 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 Energy Northwest emergency facilities of the change in emergency classification and/or protective actions.
 - d. Ensure a copy of the CNF is sent to the appropriate organizations.

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- 5. Determine if Protected Area evacuation actions need to be taken. (4.7.5) _____

 - a. Alert - Evacuation is optional, depending on event prognosis. Consider evacuating plant personnel who are not part of the ERO.
 - b. Site Area Emergency or General Emergency - Protected Area evacuation is required for most situations per PPM 13.5.1 for personnel who are not part of the ERO.

- 6. 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. (4.7.6) _____
- 7. Authorize increases to emergency worker radiation exposure limits when recommended by the Radiation Protection Manager or Radiological Emergency Manager per PPM 13.2.1. (4.7.7) _____
- 8. Authorize personnel to take potassium iodide (KI) when recommended by the Radiation Protection Manager or Radiological Emergency Manager per PPM 13.2.1. (4.7.8) _____

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Duties of: EOF Manager Secretary
 Assignment Location: Emergency Operations Facility
 Report To: EOF Manager

Responsibilities:

1. On arrival at the EOF, sign in on the staffing board, obtain your procedure book from the wall rack and your supply drawer from the EOF supply cabinet.
2. Maintain a log of EOF Manager actions, significant events and activities on an Emergency Response Log, Form 968-23895, with emphasis on:
 - a. Receipt of notifications of changes in emergency classification.
 - b. The time and content of center briefings.
 - c. Significant telephone conversations or Public Address announcements.
 - d. Entries requested by EOF decision makers.
 - e. Assignment of action items.
3. When directed, initiate Crash Network calls for the EOF Manager (acting as emergency director) by utilizing the Crash Network System Log located in the Emergency Phone Directory to perform the following:
 - a. Initiate Crash call by dialing 400.
 - 1) If there is a failure of the Crash phone, the dial up phone is the primary backup. When making notifications using the dial up, contact Benton and Franklin counties, Washington State and DOE first to ensure that 15 minute time requirement is met.
 - b. Perform a roll call of agencies contacted.
 - 1) When initiating roll call inform responding parties to standby for a call from the Emergency Director.
 - 2) Following completion of roll call indicate to the Emergency Director that parties are ready for the Crash call.
 - 3) Note on Crash call log the time of call, message, and parties online.
 - 4) Inform the EOF Manager of any offsite agency failing to respond to the roll call.

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Duties of: EOF Manager Secretary (Contd.)

4. When the EOF Manager (as Emergency Director) completes filling out the Classification Notification Form (CNF):
 - a. Make a copy of the original and provide the copy to the Admin support personnel for faxing and internal distribution.
 - b. Return the original to the EOF Manager prior to initiating Crash call notification.
5. Answer and monitor the EOF Manager's phones and record messages as necessary.
6. Monitor the EOF Manager's procedure checklist (Attachment 5.2 of this procedure) and remind him of actions required as necessary.
7. Make briefing announcements to EOF staff as directed, similar to, "There will be a briefing in five minutes. Please refer to your briefing guides."
8. Perform other EOF administrative support duties as requested by the EOF Manager.
9. Refer incoming media calls to the Joint Information Center.
10. Upon shift change:
 - a. Fully brief your relief on responsibilities, duties and the current status of work being performed.
 - b. Forward your log for review by the EOF Manager.
11. Upon shift change or termination of the emergency:
 - a. Prepare an individual After Action Report. Refer to PPM 13.13.4.
 - b. Provide support to EOF Manager as necessary in collating EOF After Action Reports or logs.
 - c. Deliver After Action Reports to the Site Support Manager.

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ENERGY NORTHWEST

WNP-2 PLANT PROCEDURES MANUAL

PROCEDURE NUMBER	APPROVED BY	DATE
*13.11.7	PJI - Revision 20	07/20/00
VOLUME NAME		
EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION		
EMERGENCY OPERATIONS FACILITY		
TITLE		
RADIOLOGICAL EMERGENCY MANAGER DUTIES		

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1.0 PURPOSE

This procedure describes the emergency responsibilities and duties of the 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 13.8.1, Emergency Dose Projection System Operations
- 2.6 PPM 13.9.1, Environmental Field Monitoring Operations
- 2.7 PPM 13.9.5, Environmental Sample Collection
- 2.8 PPM 13.9.8, River Evacuation Monitoring
- 2.9 PPM 13.13.3, Intermediate Phase MUDAC Operations
- 2.10 PPM 13.13.4, After Action Reporting
- 2.11 Emergency Response Log, 968-23895
- 2.12 Ten Mile EPZ Field Team Summary Map, 968-25130

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3.0 PROCEDURE

- 3.1 When notified of an Alert, Site Area Emergency or General Emergency, or if directed, report to the Emergency Operations Facility (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.
- 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 Plant Support Facility (PSF) and assist with EOF access control, and with evacuation assembly area accountability.

- 3.5 At Alert or higher, contact the RPM and request two HP Technicians be dispatched to the EOF for Health Physics Center (HPC) activation.
 - 3.5.1 Direct the HPC staff to set up HPC facilities and establish EOF habitability monitoring.
 - 3.5.2 Ensure appropriate radiological monitoring equipment is positioned (dose rate and air sampling) in the lower level south end PSF near the EOF and periodic dose rate and airborne surveys are performed as necessary.
- 3.6 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 cpm on a 40 ft³ 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;

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- 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.
- 3.7 Dispatch a Health Physics Technician to the PSF penthouse to determine if the following conditions exist if the plume is over the PSF:
- PSF intake air activity exceeds 100 mR/hr, or;
 - PSF return air activity exceeds 50 mR/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.
- 3.8 If the emergency worker dose limit of 5 REM is projected to be exceeded over the course of the event for EOF staff, inform the EOF Manager so that plans to evacuate the EOF and activate the Alternate EOF may be initiated.
- 3.9 Establish and maintain contact with the Radiation Protection Manager (RPM) in the TSC for a briefing on the status of the emergency, and to provide assistance in radiological assessment, mitigation activities, or dose assessment.
- 3.10 When dose assessment is fully functional, assume responsibility for offsite dose projections from the Radiation Protection Manager in the TSC, or STA in the Control Room.
- 3.11 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.
- 3.12 Determine the need for a dose adjustment factor based on dose projection results or reports from field team members indicating potential inhalation concern.
- 3.12.1 Using QEDPS, calculate a dose adjustment factor.
 - 3.12.2 If the calculated dose adjustment factor is 5 or greater, a dose adjustment factor of 5 should be implemented.

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- 3.12.3 Request a field team air sample be taken and using the sample results, adjust the dose adjustment factor accordingly.
- 3.12.4 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 the criteria for recommending KI for State, County and DOE personnel are different from those for Energy Northwest personnel.

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

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

- 3.14 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.

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

- 3.15 As necessary, complete radiological release-related portions of the Classification Notification Form for PAR modifications.
- 3.16 Provide PAR updates to the EOF Information Coordinator for maintaining the PAR status board.
- 3.17 Conduct periodic briefing sessions of the MUDAC Staff on pertinent information from incoming hard copy communications and changes in emergency status.
- 3.18 Act as 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.
- 3.19 If plant conditions indicate the possibility of an offsite release, direct the Site Support Manager to call in an additional REM to assist in interfacing with offsite agency representatives that have responded to the EOF.

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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 meets 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.

- 3.20 If a release is in progress, determine the advisability of sheltering or evacuating any manned Exclusion Area facility, i.e., PSF, Laundry, WNP-1, Ashe Substation, River Pumphouse, and determine and direct implementation of radiological protective actions for EOF personnel based on radiological conditions.
- 3.21 Review Field Team summary and dose projection summary maps for the Plume EPZ and, when applicable, the Ingestion EPZ, and have copies transmitted to the JIC, County and State Emergency Centers.
- 3.22 If necessary, direct the Site Support Manager to contact the Chemistry/Effluent Manager for support of field team sample analysis.
- 3.23 Review and determine appropriate, permissible departures from normal operation health physics procedures or Environmental Analytical Laboratory Instructions (EALIs) for offsite emergency operations.
- 3.24 Determine the distribution of MUDAC generated hard copy information for other Energy Northwest or offsite emergency centers or personnel, and retain a second copy for MUDAC records.
- 3.25 Refer to PPM 13.2.2, Section 4.3, Offsite PARs Based on Projected Doses, to determine offsite protective actions and act as the Protective Action Decision Group spokesperson in proposing PARs to the EOF Manager.
- 3.26 In the event of Protected Area evacuation, assist the RPM with coordinating HP monitoring and decontamination services at the evacuation assembly area.
- 3.27 If the determination is made to evacuate the Exclusion Area, determine if radiological hazards exist or are suspected. Determine evacuation routes and hazardous areas to avoid.
- 3.28 In the event of an Exclusion Area evacuation requiring personnel to report to the Richland Office Complex, 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 assembly area.
- 3.29 When relief from the Health Physics Network (HPN) is requested by the RPM, select a communicator and direct they maintain the EOF HPN line in accordance with Attachment 4.4.

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- 3.30 As required, direct appropriate staff to perform the following tasks in accordance with Attachment 4.5:
- 3.30.1 Prepare, issue, and collect direct reading dosimeters and TLDs for emergency response personnel.
 - 3.30.2 Ensure respirator training, medical qualifications, and fit testing for emergency support personnel, vendors, and contractors who must enter areas requiring respiratory protection is current.
- 3.31 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.
- 3.32 When notified that personnel must pass through road blocks into radiological hazard areas, determine and implement necessary radiological monitoring and protective clothing requirements.
- 3.33 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.
- 3.34 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.
- 3.35 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.
- 3.36 If injured or contaminated personnel require offsite medical attention, refer to PPM 1.9.14.
- 3.37 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.
- 3.38 Assist the Site Support Manager as necessary to establish second shift personnel for dose assessment area staff, environmental field teams and HPC staff.
- 3.39 If offsite radiological resources are needed, inform the EOF Manager.

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- 3.40 Determine disposition of Environmental Field Team samples gathered pursuant to PPM 13.9.5:
 - 3.40.1 In consultation with representatives of DOH for samples outside the Hanford Reservation.
 - 3.40.2 In consultation with representatives of DOE-RL for samples on the Hanford Reservation.
- 3.41 Upon notification of transfer of plant Post Accident Sample System (PASS) samples, brief HPC Staff on anticipated radiation levels and necessary protective measures.
- 3.42 When emergency activities have resulted in stabilizing the plant, and radiological conditions are progressing from the early phase to the intermediate phase, consider actions to transfer MUDAC leadership to the Washington State Department of Health (WADOH) Representative by:
 - 3.42.1 Implementing PPM 13.13.3, Intermediate Phase MUDAC Operations.
 - 3.42.2 Calling in another REM to help during the intermediate phase.
 - 3.42.3 Arranging additional support with the Site Support Manger to fulfill all responsibilities of MUDAC during this phase.
- 3.43 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.
- 3.44 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.
- 3.45 Refer all calls from media to the Joint Information Center.
- 3.46 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.
- 3.47 Upon shift change or termination of the emergency:
 - 3.47.1 Prepare an individual After Action Report. Refer to PPM 13.13.4
 - 3.47.2 Collect individual After Action Reports prepared by staff personnel.
 - 3.47.3 Deliver all After Action Reports and accompanying sheets to the EOF Manager.

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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 (PSF Ambulance Garage)
- 4.8 Radiological Emergency Manager Briefing Guidelines
- 4.9 Total Population Within the 10 Mile EPZ
- 4.10 EOF HVAC Automatic and Manual Operation

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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.
- C. Inform the EOF Manager when MUDAC is operational.
- D. Contact the RPM and request two HP Technicians to setup HPC facilities and establish EOF habitability monitoring.
- 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. Periodically confer with HPC staff to verify EOF habitability.
- H. Using QEDPS determine Emergency Worker Dose Adjustment factor.

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

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

NOTE: The Energy Northwest administrative exposure holdpoint (2 rem TEDE) is automatically waived for Energy Northwest emergency workers at Alert or higher emergency classifications

- J. 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. Brief all MUDAC personnel of impending PAR declaration prior to issuing the PAR.
- K. Conduct periodic briefing sessions of the MUDAC Staff on pertinent information changes in emergency status.

Attachment 4.1
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- L. Act as conduit for information flow between MUDAC, HPC personnel and the main EOF area, and provide input into EOF briefings per Attachment 4.8.
- M. If a release is in progress, determine the advisability of sheltering or evacuating any manned Exclusion Area facility, and determine and direct implementation of radiological protective actions for EOF personnel based on radiological conditions.
- N. Review Field Team summary and dose projection summary maps for the Plume EPZ and, when applicable, the Ingestion EPZ, and have copies transmitted to the JIC, County and State Emergency Centers.
- O. Review and determine appropriate, permissible deviations to normal operation Health Physics Procedures (PPMs).
- P. Determine the distribution of MUDAC generated hard copy information for other Energy Northwest or offsite emergency centers or personnel, and retain a second copy for MUDAC records.
- Q. Refer to PPM 13.2.2, to determine offsite protective action recommendations.
- R. As necessary, complete radiological release-related portions of the Classification Notification Form for PAR modifications.
- S. Provide PAR updates to the EOF Information Coordinator for maintaining the PAR status board.
- T. In the event of Protected Area evacuation, assist the RPM with coordinating HP monitoring and decontamination services at the evacuation assembly area.
- U. In the event of an Exclusion Area evacuation requiring personnel to report to the ROC, refer to PPM 13.7.5.
- V. When requested by the RPM, select an HPN communicator and direct that they maintain the HPN line in accordance with Attachment 4.4.
- W. As required, direct the HPC staff to perform the necessary tasks in accordance with Attachment 4.5.
- X. 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.
- Y. When notified that personnel must pass through road blocks into radiological hazard areas, determine and implement necessary radiological monitoring and protective clothing requirements.

Attachment 4.1

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- Z. 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.
- AA. 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.
- AB. If injured or contaminated personnel require offsite medical attention, refer to PPM 1.9.14.
- AC. If Washington State Radcon teams are not available, and establishment of an offsite survey/decontamination location is required to handle potentially contaminated personnel, make necessary arrangements.
- AD. 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.
- AE. Assist the Site Support Manager as necessary to establish second shift personnel for dose assessment area staff, environmental field teams and HPC staff.
- AF. If offsite radiological resources are needed obtain EOF Manager approval per PPM 13.14.6.
- AG. Determine disposition of Environmental Field Team samples gathered pursuant to PPM 13.9.5.
- AH. Upon notification of transfer of plant Post Accident Sample System (PASS) samples, brief HPC Staff on anticipated radiation levels and necessary protective measures.
- AI. When emergency activities have resulted in stabilizing the plant, and radiological conditions are progressing from the early phase to the intermediate phase, consider actions to transfer MUDAC leadership to the Washington State Department of Health (WADOH) Representative.
- AJ. 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.
- AK. 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.
- AL. 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.

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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 values.
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.

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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 μ R and 2 μ R 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.

Attachment 4.2
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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 micro curies/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.

Attachment 4.3

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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.
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.

Attachment 4.4

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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 Plant Support Facility (PSF); 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 PSF near the EOF and ensure operability of the EOF area radiation monitor for EOF habitability monitoring.
4. Obtain protective clothing and respirators from an appropriate location if needed.
5. Report to the Radiological Emergency Manager when all assigned systems are in a state of readiness.
6. Obtain friskers and dose rate instruments, perform daily checks, then distribute to the Ambulance Bay area radiological laboratories.
7. Frequently monitor the operation of the area radiation and airborne monitors.
8. When directed, take and evaluate direct radiation and/or contamination surveys in areas of the Plant Support Facility (PSF, EOF).
9. 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.
10. Obtain and analyze hi-volume air samples inside and outside of PSF as necessary.

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HPC Staff, (cont'd)

11. Perform decontamination of personnel as required and report results to the Radiological Emergency Manager.
12. Insure the use of appropriate radiological precautions and good practices by all individuals involved with handling of samples throughout the sampling and survey sequence.
13. 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.
14. Return reset electronic dosimeters to the EOF Field Team Cabinet.
15. Monitor radiation levels in any area where samples are stored and post area(s) as necessary, or move samples to a shielded area.
16. Maintain a record of your actions on an Emergency Response Log per PPM 13.13.4.
17. Upon shift change, brief your relief on responsibilities, duties and current status of work being performed.
18. 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.

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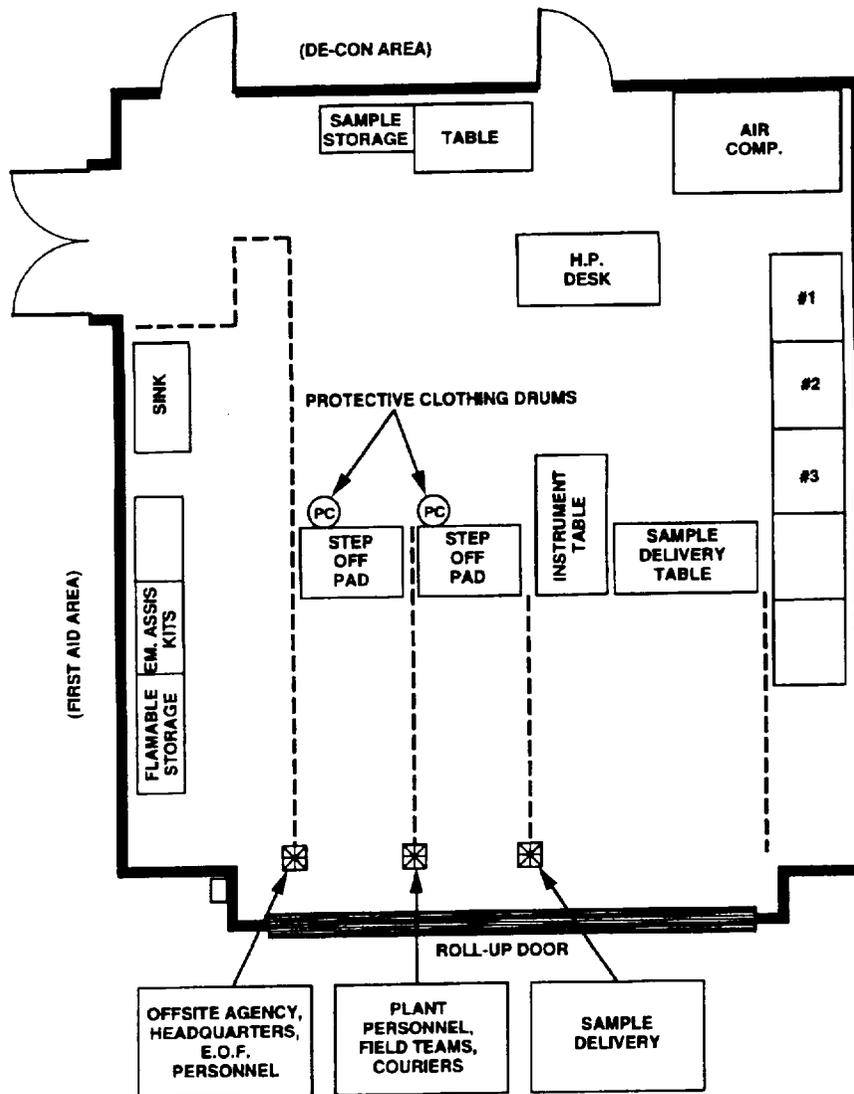
HEALTH PHYSICS CENTER STAFF
RADIOLOGICAL SAMPLE TRACKING INSTRUCTIONS

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.

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TYPICAL SET-UP FOR PSF HEALTH PHYSICS CENTER RECEIVING AREA
(PSF AMBULANCE GARAGE)



LEGEND:

- 1. - - - INDICATES WHERE TO PLACE ROPE BARRIERS
- 2. ☒ INDICATES WHERE TO POST SIGNS

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Attachment 4.7

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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:

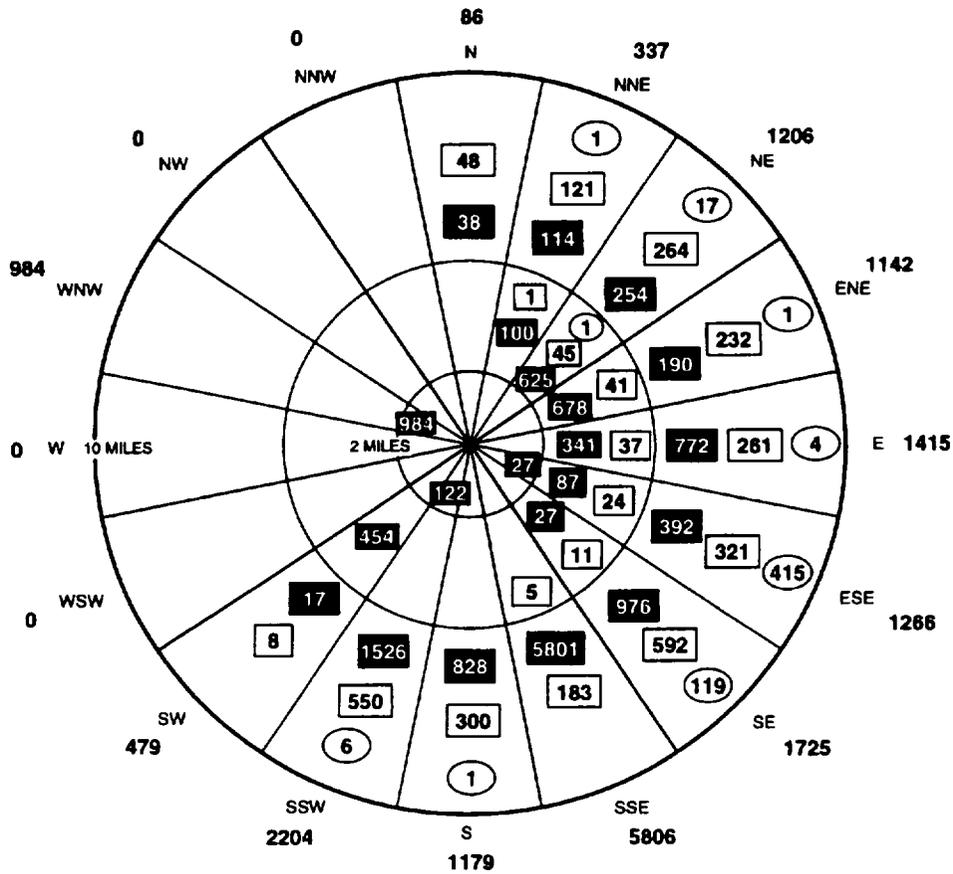
- a. Current release rate, recent trends, prognosis.
- b. Offsite dose projection results and most recent follow-up messages to offsite authorities.
- c. Energy Northwest (and offsite agency) field team survey results and their comparison to dose projection model results.
- d. Dose projection comparison 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: _____

Attachment 4.8

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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

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June 1996
Rev 18

Attachment 4.9

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EOF HVAC AUTOMATIC AND MANUAL OPERATION

MODE 1 - PSF 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 PSF 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 PSF. 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.

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EOF HVAC AUTOMATIC AND MANUAL OPERATION (Contd.)

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, Rm 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.

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**COLUMBIA GENERATING STATION
PLANT PROCEDURES MANUAL**

PROCEDURE NUMBER *13.14.4	APPROVED BY DWC - Revision 32	DATE 07/20/00
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION SUPPORTING INFORMATION PROCEDURES		
TITLE EMERGENCY EQUIPMENT		

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5.3 Hospital Radiological Emergency Kits 47

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5.5 Communications System Tests 50

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5.8 Ventilation Radiation Monitoring 69

5.9 Facilities Systems Tests 70

5.10 Emergency Response Data System (ERDS) 71

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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. Items in this procedure are identified as REQUIRED or DESIRED. {R-5928}

2.0 DISCUSSION

Items or functional tests that are REQUIRED meet the intent of the WNP-2 Emergency Plan's requirements.

Items or functional tests that are DESIRED are in place to assist emergency functions. The Corporate Emergency Preparedness, Safety and Health Officer may make determinations for changes to desired quantities, types of items, or functional tests as required for good emergency preparedness practices. Changes to DESIRED types or quantities of items should not be less conservative than REQUIRED.

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 Columbia Generating Station Final Safety Analysis Report (FSAR), Section 13.3, Emergency Plan, Appendix 3, Emergency Kits
- 3.2 WNP-2 Final Safety Analysis Report (FSAR), Section 13.3, 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 Problem Evaluation Request (PER) 293-1343
- 3.5 10CFR50, Appendix E {R-5756, R-5928}
- 3.6 10CFR50, Appendix R {R-6917, R-6918, R-10307, R-10309, R-10311}
- 3.7 GO2-92-257, letter to NRC regarding ERDS Data Point Library, 11-24-92
- 3.8 Columbia Generating Station Final Safety Analysis Report, Appendix F, Table F.3-2, Section III.H
- 3.9 PPM 2.9.5, Plant Communications Systems

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- 3.10 PPM 13.14.9, Emergency Program Maintenance
- 3.11 PPM 13.10.6, Plant/NRC Liaison Duties
- 3.12 Emergency Response Log, 968-23895
- 3.13 Classification Notification Forms, 968-24075
- 3.14 Event Notification Worksheet, NRC Form 361, 968-25665
- 3.15 Repair Team Briefing/Debriefing Form, 968-25560
- 3.16 Emergency Director Turnover Sheet, 968-25810
- 3.17 10 Mile EPZ Dose Projection and Data Map Form, 968-25831
- 3.18 Skin/Clothing Contamination Report, 968-24080

4.0 PROCEDURE

4.1 Supervisor, Health Physics 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/ROC Emergency Equipment:

Field Monitoring Kits:

Location:

- Plant Support Facility and Richland Office Complex (ROC)

Decon Storage Area:

Location:

- ROC Room 1-208A

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River Evacuation Kits:

Location:

- ROC

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 task sheets are to be forwarded to the Preventative Maintenance Program Group.

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 Complete task sheets and forward them to the Preventative Maintenance Program Group.

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4.3 Operations Manager 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 task sheets are to be forwarded to the Preventative Maintenance Program Group.

4.4 Manager, Security Programs 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 Completed task sheets are to be forwarded to the Preventative Maintenance Program Group.

4.5 Supervisor, Telecommunications Installation And Maintenance 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 task sheets are to be forwarded to the Preventative Maintenance Program Group.

4.6 Supervisor, Facilities Maintenance 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 task sheets are to be forwarded to the Preventative Maintenance Program Group.

4.7 Corporate Emergency Preparedness, Safety and Health Officer

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 task sheets are to be forwarded to the Preventative Maintenance Program Group.

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- 4.7.3 Ensure that the Building 100 medical equipment and supplies are checked per Attachment 5.6, Building 100 Medical Equipment and Supplies.
- 4.7.4 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
- 4.7.5 Ensure the Emergency Phone Directory is maintained per the instructions outlined in Attachment 5.4, Emergency Planner Communications System Tests.
 - 4.7.6 Ensure the dedicated telephone lines are checked per the instructions outlined in Attachment 5.4, Emergency Planner Communications System Tests.
 - 4.7.7 Ensure the Emergency Response Data System (ERDS) is tested quarterly as outlined in Attachment 5.5, Communications System Tests.
 - 4.7.8 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.
 - 4.7.9 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.
 - 4.7.10 Monitor compliance with this procedure's requirements, and take action to ensure discrepancies are corrected. Auditable records of performance of all required checks are located in the Scheduled Maintenance System portion of the Passport work control module.

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5.0 ATTACHMENTS

- 5.1 WNP-2 Emergency Equipment
- 5.2 EOF/ROC Emergency Equipment
- 5.3 Hospital Radiological Emergency Kits
- 5.4 Emergency Planner Communications System Tests
- 5.5 Communications System Tests
- 5.6 Building 100 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)

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WNP-2 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

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**ITEMS IN/NEAR
FIRE BRIGADE STATIONS**

{R-6917, R-10307,
R-10311, R-6918}

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u>
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		5 Pair
Firefighter Turnout Gear		
- Boots		15 Pair
- Coats		15
- Gloves		15 Pair
- Helmet/Shield/light w/batteries		15
Personal Alert Safety System (PASS) devices		10
SCOTT Self Contained Breathing Apparatus	10	10
SCOTT Spare Cylinders	20	20
Stretcher		1
Smoke evacuation fan and exhaust trunk		1
* Radios (Motorola HT-1000) on charger		6
* Radio batteries (alkaline)		6

* Items only found at TG 441', Station 1

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ITEMS IN/NEAR
FIRE BRIGADE STATIONS

{R-6917, R-10307,
R-10311, R-6918}

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u>
* 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
- Power Block Pre-fire Plans		1 set
- Radios		2
- Radio batteries		2
- Flashlights, 6V lantern		2
- Batteries, 6V		2
- Flashlights, helmet style		2
- Hose nozzle (with ball shut off valve)		1
- Mechanical timers		2
- Dry erase board		1
- Telephone, with cord		1

* Items only found at TG 441', Station 1

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**ITEMS IN/NEAR
FIRE BRIGADE STATIONS (Cont.)**

EMERGENCY RESPONSE VAN

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
1 1/2" hose - 200 feet	1	1
2 1/2" hose - 300 feet	1	2
1 1/2" Adjustable Fog Nozzles	1	2
Hydrant Wrench	1	2
2 1/2" x 1 1/2" x 1 1/2" Gated Wye		1
2 1/2" Gate Valve		1
20# ABC Extinguisher	1	2
Foaming agent		4
Foaming agent eductor		1
Halon Extinguisher		1

+ Includes required quantities

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**INSTRUCTIONS
FIRE BRIGADE STATIONS (Cont.)**

Passport Activity: 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 - WNP-2 Protected Area

Monthly (and after use):

NOTE:

- SCBA's are inspected monthly under Work Item HPSCHD105.
- FSAR Appendix F requires one hour of spare air for each SCBA unit. Credit is allowed for spare cylinders at other staging locations on site to meet required inventory minimum quantities, provided one hour of spare air is available for all required inventory SCBA units.

SCBA's

- Verify that the seal on the SCBA containers is intact.
If it is not then inspect the SCBA as follows:
 - Verify the calibration date on the SCBA regulator will not be exceeded prior to its next check
 - Verify spare air cylinders full, GTE 4000 psi
 - Inspect Scott Air Packs
 - 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 required quantities are correct
- Perform operational checks
 - Six-volt battery lanterns/flashlights
- Check physical condition of station/van contents and replace items, as necessary

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INSTRUCTIONS
FIRE BRIGADE STATIONS (Cont.)

For each PASS device:

- 1) Switch the device to the Auto mode. Set the device aside and do not disturb for the duration of the test.
- 2) A "chirp" indicates a low battery. To change the battery:
 - Turn off the PASS device.
 - Twist the large end of the device to access the battery compartment.
 - Replace the battery with a fresh 9 volt battery.
 - Reassemble the device.
 - Begin the test again.
- 3) Verify that the pre-alert signal sounds at 20-30 seconds.
- 4) Verify that the alarm signal sounds at 25-35 seconds.
- 5) Immediately switch the PASS device off.

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ITEMS IN/NEAR
DECONTAMINATION KITS

{R-5756}

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u> +
Body Outline Forms	4	6
Facial Tissue		2 Boxes
Cotton Rolls or Balls		2 Boxes
Cotton Tip Applicators		100
Liquid soap		1 Bottle
Washcloths		25
Procedures	1 Set	1 Set
Masking Tape		1 Roll
Disposable Cups		25
Plastic Bags		10
Sample Envelopes		20
Scissor		1
Skin Conditioner		1 Jar
Soft Scrub Brush		2
Nail Brush		1
Surgical Gloves		10 Pair
Toweling (487' RW only)		1 Set

+ Includes required quantities.

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INSTRUCTIONS
DECONTAMINATION KITS (Cont.)

Passport Activity: HPSCHD114

Locations:

- Kit 1D - Radwaste Building, 487' elevation, Men's Locker Room
- Kit 2D - Radwaste Building, 487' elevation, Women's Locker Room
- Kit 3D - Service Building, 441' elevation, Emergency Equipment Area

Quarterly (and after use):

- Inventory contents and ensure required quantities are correct.
- 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.

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**ITEMS IN/NEAR
FIRST AID KIT - TYPE A (SILVER BOX)**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Clam Shell		1
Spider Strap		1
Kendrick Extraction Device (K.E.D.)		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
Sager Traction Splint		1
Large Bio-Hazard Bag		1
Face Shield		3
Gown, Infection Control		2
Body Fluid Clean-up Kit		2

+ Includes required quantities

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INSTRUCTIONS
FIRST AID KIT - TYPE A (SILVER BOX) (Cont.)

Passport Activity: 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
- Check physical condition of contents and replace items, as necessary

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**ITEMS IN/NEAR
FIRST AID KIT - TYPE B (TRAUMA KIT)**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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
Stretcher		1
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

+ Includes required quantity.

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INSTRUCTIONS
FIRST AID KIT - TYPE B, TRAUMA (Cont.)

Passport Activity: 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

Monthly (and after use):

- Inventory contents.
- 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).

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**ITEMS IN/NEAR
EMERGENCY PROTECTIVE EQUIPMENT KIT (TSC)**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Protective Clothing	10 sets	25 sets
- Coveralls		
- Hoods/caps		
- Plastic Booties		
- Rubber Boots		
- Rubber Gloves		
- Glove Liners		
Respirators (particulate)	10, (2 small, 2 large)	25
Combination Filters (respirator)	20	50
Pocket Dosimeters	10	25
Dosimeter Charger		1
Duct Tape		1 roll
Masking Tape		1 roll

+ Includes required quantities.

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INSTRUCTIONS
EMERGENCY PROTECTIVE EQUIPMENT KIT (TSC) (Cont.)

Passport Activity: HPSCHD6

Location:

- Technical Support Center

Monthly (and after use):

- Verify that the respirators have been inspected within the past month.
- Inventory contents and ensure required quantities are correct.
- Perform operational checks
 - Dosimeter charger
 - Dosimeters (re-zero)
- Check physical condition of cabinet contents and replace items, as necessary

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PLANT EMERGENCY ALERTING SIGNALS

Passport Activity: EMERG.ALERT SYSTEM

Location: Control Room

Monthly: (Required) Perform operational check.

The following demonstrations should be immediately preceded by voice announcement over the high power public address system.

Demonstrations should be conducted on all shifts on the first day of each month, at approximate times as follows:

Day Shift - 1400

Mid Shift - 0200

The following public address format should be adhered to:

A. Alerting Tone:

- **Announce: "This is a demonstration of the ALERTING TONE. This is a demonstration of the ALERTING TONE."**
- **Sound the ALERTING TONE (pulsed tone-constant level) for approximately 5 seconds seconds by depressing the "ALERT" push button.**
- **Stop the ALERTING TONE by depressing the "CAN-CEL" push button.**
- **Announce: "This concludes the demonstration of the ALERTING TONE."**
- **"This concludes all signal demonstrations, regard all further signals as real."**

Attachment 5.1-6

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ITEMS IN/NEAR
EMERGENCY PROTECTIVE EQUIPMENT KIT (OSC)

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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	0	3
2" Filter Paper	1 box	
Scott Air Packs	4	4
Spare air, per each SCBA unit	1 hr	1 hr
CAM, AC Powered	1	1
Silver Zeolite Cartridge	6	6
Area Radiation Monitor	1	

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INSTRUCTIONS
EMERGENCY PROTECTIVE EQUIPMENT KIT (OSC) (Cont'd)

Passport Activity: HPSCHDOSCPCKIT

Location:

- Operations Support Center

Annually (and after use)

- Inventory contents and ensure required quantities are correct
- Replace all rubber protective clothing and masking tape

Monthly (and after use)

- Inventory instrumentation and ensure required quantities are correct
- 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 replace as necessary:
 - HP Instrumentation
- Perform operational checks on the following equipment:
 - Area Radiation Monitor
 - AMS-3 CAM
 - Battery Powered Air Samplers

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EOF/ROC 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

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**ITEMS IN/NEAR
FIELD SAMPLING KIT**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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

+ Includes required quantities.

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INSTRUCTIONS
FIELD SAMPLING KIT (Cont.)

Passport Activities: FIELD SAMPLE KIT 1FS
 FIELD SAMPLE KIT 2FS
 FIELD SAMPLE KIT 3FS
 FIELD SAMPLE KIT 4FS

Locations:

- Kit 1FS - Field Team Cabinet Number 1, PSF Ambulance Garage
- Kit 2FS - Field Team Cabinet Number 2, PSF Ambulance Garage
- Kit 3FS - Field Team Cabinet Number 3, PSF Ambulance Garage
- Kit 4FS - ROC, Cabinet Number 4, MPF, 1st Floor, Room 201

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.

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**ITEMS IN/NEAR
PROTECTIVE CLOTHING KIT**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Case for Equipment		1
Hoods	2	3
Coveralls	2	3
Rubber Gloves	2 pair	3 pair
Rubber Boots	2 pair	3 pair
Masking Tape (2")	1 roll	2 rolls
Rain Suits		3
Razor and Shaving Cream		1 set
Plastic Bags		Assorted
Skull caps		3
Cotton glove liners		1 pkg.

+ Includes required quantities.

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INSTRUCTIONS
PROTECTIVE CLOTHING KIT (Cont.)

Passport Activities: PC KIT 1PC
 PC KIT 2PC
 PC KIT 3PC
 PC KIT 4PC

Locations:

- Kit 1PC - Field Team Cabinet Number 1, PSF Ambulance Garage
- Kit 2PC - Field Team Cabinet Number 2, PSF Ambulance Garage
- Kit 3PC - Field Team Cabinet Number 3, PSF Ambulance Garage
- Kit 4PC - ROC, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

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.

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**ITEMS IN/NEAR
AIR SAMPLING KIT**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Case for Equipment		1
Portable Air Sampler	1	1
Model H809C Air Sampler Manual		1
Paper Filters	25	100
Note Pads (3x5)		3
Pens (Black)		3
Charcoal Cartridges	3	6
Tweezers		1
Silver Zeolite Cartridges	3	6
Spare Fuse		1
Stopwatch		1
Alligator Forceps		1

+ Includes required quantities.

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INSTRUCTIONS
AIR SAMPLING KIT (Cont.)

Passport Activities: **AIR SAMPLE KIT 1AS**
 AIR SAMPLE KIT 2AS
 AIR SAMPLE KIT 3AS
 AIR SAMPLE KIT 4AS

Locations:

- **Kit 1AS - Field Team Cabinet Number 1, PSF Ambulance Garage**
- **Kit 2AS - Field Team Cabinet Number 2, PSF Ambulance Garage**
- **Kit 3AS - Field Team Cabinet Number 3, PSF Ambulance Garage**
- **Kit 4AS - ROC, Cabinet Number 4, MPF, 1st Floor, Room 201**

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 .**
- **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.**

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ITEMS IN/NEAR
INSTRUMENTATION KIT

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Case for Equipment		1
Low Range Dose Rate Meter (MicroR)	1	1
High Range Dose Rate Meter (Ion Chamber)	1	1
Count Rate Meter (w/G-M Pancake Probe)	1	1
Pocket Dosimeter (0-5 R Range)	2	3
Pocket Dosimeter (0-500 mR Range)	2	3
Dosimeter Charger		1
Portable Radio (located in radio storage cabinet)	2	
Radio battery (1 in kit, 1 in radio storage cabinet)	2	
AC Radio Charger		1
++ Check Source Cs-137		1
KI Tablets	2 bottles	2 bottles
Calculator		1
D-Cell Batteries		8
9-Volt Batteries		4
Note Pads (3x5)		3
Pens (black)		3
Compass		1
Battery Lantern (D - Cell)		1
Flashlight		1
Packet Containing (In lid pocket of equipment case)		1
- Credit Card		1
Wood Stakes, Survey Markers (In Cabinet)		10
First Aid Kit (In Cabinet)		1

+ Includes required quantities.

++ Source is stored in a shielded container (pig) in the radio storage cabinet

Attachment 5.2-4

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INSTRUCTIONS
INSTRUMENTATION KIT (Cont.)

Passport Activities: QTRLY INST KIT 1IK
 QTRLY INST KIT 2IK
 QTRLY INST KIT 3IK
 QTRLY INST KIT 4IK
 CHANGEOUT RADIOS

Locations:

- Kit 1IK - Field Team Cabinet Number 1, PSF Ambulance Garage
- Kit 2IK - Field Team Cabinet Number 2, PSF Ambulance Garage
- Kit 3IK - Field Team Cabinet Number 3, PSF Ambulance Garage
- Kit 4IK - ROC, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (and if used or if seal not intact):

- Inventory contents and ensure required quantities are correct.
- 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:
 - Pocket dosimeters (re-zero)
 - Portable instruments (battery check)
 - Dosimeter charger
 - Calculator
 - Battery lantern
 - Flashlight
- Ensure expiration dates will not be exceeded prior to the next quarterly check:
 - Credit cards
 - Iodine tablets

Annually:

- Replace radios (obtain replacement radios and batteries from radio/battery charging unit in PSF Room 118A cabinet next to decon showers and deliver replaced radio/batteries to Telecommunications for operational check).

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ITEMS IN/NEAR
DECON CABINET

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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

- + Includes required quantities.
- ++ Ensure film has not exceeded its expiration date

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INSTRUCTIONS
DECON CABINET (Cont.)

Passport Activity: DECON CABINET

Location:

- DC - Emergency Cabinet Number 14, PSF Decon Shower Area

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 instrument
 - Chemicals
- Perform operational check on portable instruments (battery check).

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ITEMS IN/NEAR
EXTRA PROTECTIVE CLOTHING

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u> +
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

+ Includes required quantities.

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INSTRUCTIONS
EXTRA PROTECTIVE CLOTHING (Cont.)

Passport Activities: EXTRA PC KIT 1XP
 QTRLY CHK PC KIT 2PC

Location:

- Kit 1XP - Emergency Cabinet Number 6, PSF Ambulance Garage
- Kit 2XP - Emergency Cabinet Number 6, PSF Ambulance Garage

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.

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**ITEMS IN/NEAR
RIVER EVACUATION MONITORING KIT**

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Dosimeter Charger		1
Pocket Dosimeter:		
0-5 R	2	3
0-500 mR	2	3
High Range Dose Rate Meter (Ion Chamber)	1	1
Low Range Dose Rate Meter (microR)	1	1
++ Check Source		1
KI Tablets	2 bottles	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

+ Includes required quantity.

++ Source is stored in a shielded container (pig).

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INSTRUCTIONS
RIVER EVACUATION MONITORING KIT (Cont.)

Passport Activities: **RIVER EVAC MON KIT**
 CHANGEOUT RADIOS

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 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:
 - Potassium Iodide (KI) tablets
 - Dose rate meter
- Perform operational checks:
 - Portable instrument (battery check)
 - Dosimeter charger
 - Radio

Annually

- Replace radio and batteries. (Obtain replacement radio and batteries from radio/battery charging unit in PSF Room 118A cabinet next to decon showers and deliver replaced radio/batteries to Telecommunications for operational check.)

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ITEMS IN/NEAR
RIVER EVACUATION DECONTAMINATION KIT

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Dosimeter Charger		1
Pocket Dosimeter:		
0-5 R	2	3
0-500 mR	2	3
Bucket (in Cabinet)		1
Sponges		5
Soap		2
Toweling, disposable		10
Ribbon, Rad. Barrier		2 rolls
Signs, Rad. Warning w/inserts		4
Coveralls	2	5
Hoods	2	5
Shoe covers	2 pair	5 pair
Rubber gloves	2 pair	10 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	1
++ Check Source		1
Portable Radio	1	1
KI Tablets	2 bottles	2 bottles
Pens		5

+ Includes required quantity.

++ Source is stored in a shielded container (pig).

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INSTRUCTIONS
RIVER EVACUATION DECONTAMINATION KIT (Cont.)

Passport Activities: RIVER EVAC DECON KIT
CHANGEOUT RADIOS

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 required quantities are correct.
- 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

Annually:

- Replace radio and batteries. (Obtain replacement radio and batteries from radio/battery charging unit in PSF Room 118A cabinet next to decon showers and deliver replaced radio/batteries to Telecommunications for operational check.)

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ITEMS IN/NEAR
DECON STORAGE AREA

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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	3
Extra Probes/cables		3
High Range Dose Rate Meter (Ion Chamber)	1	2
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 bottles	3 bottles
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

+ Includes required quantities.

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ITEMS IN/NEAR
DECON STORAGE AREA (Cont.)

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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

+ Includes required quantities.

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**INSTRUCTIONS
DECON STORAGE AREA (Cont.)**

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

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EQUIPMENT FOR PASS

Passport Activity: EOF EQUIPMENT PASS

<u>Locations:</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
Hoist - Crane - (Ambulance Bay)	1	1
Ramp - (Counting Room)		1
Handle for Cask - (Counting Room)		1
Tongs - (Chemistry Lab)	1	2
Syringes and Needles - (Chemistry Lab)		4
Serum Bottles - (Chemistry Lab)		4
pH Meter Probe - (Chemistry Lab)	1	1

Quarterly:

- Inventory contents and ensure required quantities are correct.
- Check physical condition of contents and replace, as necessary

+ Includes required quantities.

Attachment 5.2-10

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CONTENTS

HOSPITAL RADIOLOGICAL EMERGENCY KIT

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
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
Procedures		4 copies
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	1
Dose Rate Meter	1	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		8

+ Includes required quantities.

Attachment 5.3

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INSTRUCTIONS

HOSPITAL RADIOLOGICAL EMERGENCY KIT

PTL Activities: 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 required quantities are correct.
- Check physical condition of contents and replace items, as needed.
- Ensure portable instrument calibration and TLD dates will not be exceeded prior to quarterly check.
- Verify that all procedures and action cards are the current revision.

Attachment 5.3
Page 2 of 2

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EMERGENCY PLANNER COMMUNICATIONS SYSTEM TESTS

PASSPORT Activities: OFFSITE COMM DRILL

PTL Activity: NRC PHONE TESTING, R 153957
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 and 13.8.2.

Quarterly:

- Verify accuracy of Emergency Phone Directory. Revise and reissue, as needed.

Attachment 5.4

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COMMUNICATIONS SYSTEM TESTS

Passport Activities: EMERG.FAX TEST
SIREN POLLING TEST
EXCLUSION AREA SIREN
DEDICATED PHONE TEST
OPSSCHD135
EOF RADIOS
CHANGEOUT RADIOS
OSC RADIO BATTERIES
AAP CONSOLE
COMM CONSOLE #2
COMM CONSOLE #3
EOF RADIOS
RADIO CONTROLLERS

PTL Activities: ERDS Test, R 150208
Pager Test, R 153965
NRC Phone Testing, R 153957
Data Circuit Testing, R 153956

A. Facsimile Network (Required)

Locations:

- WNP-2 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.

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COMMUNICATIONS SYSTEM TESTS (Cont.)

B. Siren System (Required)

Monthly:

- Document performance of bimonthly siren system status tests.

NOTE: Growl testing is not applicable to this siren system.

Annually

- Perform full operational test of siren system.

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)

Monthly:

- Check status of data circuits between Energy Northwest facilities by ensuring terminals in the TSC and EOF are accessing plant data. {3.4}

Quarterly

- Perform ERDS testing. Refer to PPM 13.10.6.

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COMMUNICATIONS SYSTEM TESTS (Cont.)

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:

- Replace batteries and perform operational checks on portable radios (OSC).

H. Communication Consoles (Required)

Locations:

- 1CC - Security Communications Center (1)
- 2CC - WNP-2 Central Alarm Station (1)
- 3CC - WNP-2 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 quarterly activation test.

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COMMUNICATIONS SYSTEM TESTS (Cont.)

J. Auto Dialer (Required)

Quarterly:

- Perform quarterly activation test.

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.

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BUILDING 100 MEDICAL EQUIPMENT AND SUPPLIES

ITEMS IN/NEAR
Building 100

	<u>Minimum</u>
Supplies:	
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

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INSTRUCTIONS

BUILDING 100 MEDICAL EQUIPMENT AND SUPPLIES (Cont.)

PTL: 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 required quantities are correct.
- 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.

Attachment 5.6
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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 EOF Engineering Library Inventory List
- 5.7-9 Joint Information Center Inventory List

Attachment 5.7

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INSTRUCTIONS

EMERGENCY CENTERS

Quarterly:

- Perform inventory and ensure required quantities are correct.
- 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 physical condition of center contents.
- Verify potassium iodide (if present) will not exceed expiration date prior to next quarterly check.
- Perform operational checks on center contents as appropriate to insure all listed equipment is functional.
- Arrange replacement of missing items, as necessary.

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.

Attachment 5.7-1

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CONTROL ROOM

Passport Activity: OPSSCHD164

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired +</u>
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)	1 Set	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)	1	2
Classification Notification Forms (968-24075)	25	50
After Action Report Forms		25
Emergency Response Log (968-23895)		1 Pad
Potassium Iodide Bottles (Shift Manager's Desk)	7 Bottles	7 Bottles
Facsimile Machine	1	1
Facsimile Machine Spare Paper Roll	1	2
Event Notification Worksheet, NRC Form 361 (968-25665)	25	50

+ Includes required quantities.

Attachment 5.7-2

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TECHNICAL SUPPORT CENTER

PTL Activity: TSC Inventory, R 153961

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
Printer/Plotter Device (HP DeskJet 1600C)	1	1
Schematic Printer (D-Scan)	1	
Aperture Card Reader/Printer	1	1
+Emergency Response Data System (ERDS) User's Manual		1
Classification Notification Forms (968-24075)	25	50
Event Notification Worksheet, NRC Form 361 (968-25665)	25	
Repair Team Briefing/Debriefing Form (968-25560)	25	
Emergency Director Turnover Sheet (968-25810)	25	
10 Mile EPZ Dose Projection and Data Map Form (968-25831)	25	
After Action Report Forms		25
Battery powered lanterns	2	
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
WNP-2 Site Map		1
Clock (24 hour display)		1
Electronic White Boards (Plant Status, Significant Events)		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

+ Custodian is Administrative Services.

++ Includes required quantities.

Attachment 5.7-3

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TECHNICAL SUPPORT CENTER

INVENTORY LIST (Cont.)

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
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	
Columbia Generating Station Emergency Plan		1
INPO Resources Manual		1
Emergency Phone Directories		4
Cordless PA Microphone		2
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	
Plant/NRC Liaison	1	
Information Coordinator	1	
Chemistry/Effluent Manager	1	
TSC Manager Secretary	1	
KI tablets	25 bottles	25 bottles
Technical Support Guidelines (TSG)		1 set

++ Includes required quantities

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OPERATIONS SUPPORT CENTER

PTL Activity: OSC Inventory, R 153962

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
WNP-2 Emergency Plan		
Emergency Plan Implementing Procedures (Vol. 13)	1 Set	1 Set
Emergency Phone Directory	1	2
WNP-2 Shielding Evaluation Report	1	1
Sign in Board		1
Plant Status Board		1
OSC Team Locator Tiles		1
Electronic White Board		1
WNP-2 Site Map		1
Clock (24 hour display)		1
After Action Report Forms		25
Radio - Base Station	1	1
Radio - Portable	2	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 bottles	25 bottles
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

++ Includes required quantities.

+ Maintained also as part of Clearance Order Review Committee (CORC) files.

Attachment 5.7-4

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EMERGENCY OPERATIONS FACILITY

PTL Activity: EOF Inventory, R 153964

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> +
WNP-2 Emergency Plan:		2
Emergency Operations Area		
Dose Assessment Area		
Oregon WNP-2/Hanford Emergency Response Plan		1
Emergency Plan Implementing Procedures: (Vol. 13)	2 Sets	3 Sets
Emergency Operations Area		
Dose Assessment Area		
Emergency Phone Directory:	4	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
Emergency Classification/Protective Action Area Status Board		1
Plant Status Board (Electronic White Board)		1
Protective Action Checklists (SAE & GE)/PAR Flow Charts		1 Set
WNP-2 Cutaway Poster		1
Clock (24 hour display)	1	2
Individual Position Signs		As required
Classification Notification Forms (968-24075)	25	50
After Action Report Forms		50
Binder Containing Maps of Local Areas	1	1
Information Coordinator Remote Headset	1	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	1 Set
Franklin County Radiological Emergency Response: WNP-2	1 Set	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.

Attachment 5.7-5

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EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Cont.)

<u>Item</u>	<u>Required</u>	<u>Desired +</u>
LAN Laser Printer	1	1
Overhead Projector		1
Dose Projection PCs	2	3
KI Tablets	75 bottles	75 bottles
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

+ Includes required quantities

++ (3 packets in MUDAC cabinet; 3 packets at the Hdqtrs/MPF cabinet, outside room 201)

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EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Cont.)

<u>Item</u>	<u>Required</u>	<u>Desired</u> +
Individual Volume 13 Procedures for the Following:	1	
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		
 Cordless PA Microphone	 1	
Audio Link Headsets for Crash Phone		12
Technical Support Guidelines (TSG)		1 Set

+ Includes required quantities

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ALTERNATE EOF INVENTORY LIST

PTL Activity: Alternate EOF Inventory, R 156869

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u>
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: WNP-1		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 & GE Protective Action Checklists & Offsite PAR Flow Chart		1
Meteorological and Plume Data Status Board		1
Plume EPZ Map with Lat./Long.		1
Ten Mile Emergency Planning Zone Map		1
Fifty Mile Emergency Planning Zone Map with Lat./Long.		1
Emergency Classification Action Status Board		1
Emergency Phone Directories		4
Classification Notification Forms (968-24075)		25

Attachment 5.7-6

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SECURITY COMMUNICATIONS CENTER

Passport Activity: ALT ACCESS POINT

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired +</u>
EPIP Position Book		1 Book
Emergency Phone Directory	1	1
NEFAX Paper (Spare)		1 Roll
Classification Notification Forms (968-24075)	25	50
After Action Report Forms		25
Emergency Response Log (968-23895)		1 Pad
KI Tablets	6 bottles	6 bottles

+ Includes required quantities.

Attachment 5.7-7

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EOF ENGINEERING LIBRARY

PTL Activity: EOF Records Room, R 144294

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
WNP-2 Emergency Plan	1	1
WNP-2 Shielding Evaluation Report	1	1
+ Top Tier Drawing List (E556)	1	1
WNP-2 Technical Specifications	1	1
WNP-2 Plant Operating Procedures	1 Set	1 Set
WNP-2 Final Safety Analysis Report	1 Set	1 Set
WNP-2 Top Tier Drawings	1 Set	1 Set
Aperture Card Reader/Printer	1	1
INPO Emergency Resources Manual		1
Set of AED/CVI Aperture Cards		1 Set
Washington State Emergency Response Plan (Controlled Manual Holder's Copy No. 73)		1
Washington State Response Procedures for Radiation Emergencies (Controlled Manual Holder's Copy No. 105)		1
Benton County Emergency Response Plan (Controlled Manual Holder's Copy No. 30)		1
Franklin Country Emergency Response: WNP-2		1

+ Quarterly

Ensure that document contains the most recent published revision.

++ Includes required quantities.

Attachment 5.7-8

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JOINT INFORMATION CENTER

PTL Activity: JIC Equipment, R 153963

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> +
WNP-2 Emergency Plan		1
Emergency Plan Implementing Procedures	1 Set	1 Set
Emergency Phone Directory	1	4
Columbia Generating Station Systems Manuals (6 Vols)		1 Set
Media Information Packages		15
Slides Representing Plant Systems (in Auditorium Projection Booth)		1 Set
Clock		3
Emergency Classification Action Status Board		1
TV Monitor (broadcast)		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
After Action Report Forms		25
Emergency Response Log (968-23895)		1 Pad
Phone Team Resource Books		10
Plant Status Update (968-25918)		1 pad
Office Supplies		++

+ Includes required quantities.

++ Per posted inventory on cabinet, Room 1-222

Attachment 5.7-9

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VENTILATION RADIATION MONITORING

Passport Activity: EOF HVAC TESTING

HVAC (Required)

Location:

- Emergency Operations Facility (EOF)

Quarterly

- Perform radiological check of HVAC in accordance with HPI 7.45 with assistance from Facilities personnel for verification.
- Document this check by signing the Passport task sheet and return it to the PM Program Group.

Attachment 5.8

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FACILITIES SYSTEMS TESTS

Passport Activities: AMA CF 52
OFMA HF 1H
OFMA HF 1C
EOF HVAC TESTING
HDQTRS AND EOF DG
HDQTRS & EOF DG, QTR

A. HVAC (Required)

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.
- Document this check by signing the Passport task sheet and return it to the PM Program Group.

B. 18 Months

- Perform Carbon and HEPA DOP tests for the applicable EOF and TSC units.

C. Diesel Generators (Required)

Locations:

- ROC
- Emergency Operations Facility (EOF)

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.

Attachment 5.9

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EMERGENCY RESPONSE DATA SYSTEM (ERDS)

Data Point Library Reference

<u>EPN</u>	<u>TDAS</u>	
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	

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EMERGENCY RESPONSE DATA SYSTEM (ERDS) (Cont'd)

The following computer points have the instrument loop listed.

<u>EPN</u>	<u>COMPUTER POINT</u>	
MET-TE-10 MET-TE-11	F146AV	{3.5} {3.6}
MET-TRL-1/PC8 MET-TRL-1/PC10 MET-TRL-1/PC11 MET-TRL-1/PC7		
MET-WDT-1 MET-TRL-1/PC2 MET-TRL-2/PC2	F143AV	
MET-WDT-2 MET-TRL-1/PC4 MET-TRL-2/PC4	F145AV	
MET-WST-1 MET-TRL-1/PC1 MET-TRL-2/PC1	F142AV	
MET-WST-1 MET-TRL-1/PC3 MET-TRL-2/PC3	F144AV	

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