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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • Richland, Washington 99352-0968

April 29, 1997
GO2-97-083

Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2 OPERATING LICENSE NPF-21
1997 QUALITY AUDIT OF WNP-2 EMERGENCY PREPAREDNESS
PROGRAM**

Enclosed is a copy of the 1997 Quality Audit of the WNP-2 Emergency Preparedness Program. This is transmitted to your organization in accordance with NUREG-0654, Section II, Criteria P.9.

Three Problem Evaluation Requests (PERs) and ten recommendations for improvement were issued as a result of audit activities. Though several opportunities for improvement exist within the Emergency Preparedness area, the audit results indicate that the WNP-2 Emergency Preparedness Program is capable of protecting the health and safety of the public in the event of an emergency.

If you have any questions regarding the audit, please contact George Reed, Corporate Emergency Preparedness, Safety & Health Officer at (509) 377-8568.

Respectfully,

P. R. Bernis (Mail Drop PE23)
Vice President, Nuclear Operations

Enclosure: Quality Audit 297-005

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Quality Department Audit Report

WNP-2 EMERGENCY PREPAREDNESS PROGRAM

Audit 297-005

March 31, 1997

Audit Dates: February 24, 1997 - March 14, 1997
Entrance Meeting: February 24, 1997
Exit Meeting: March 17, 1997



**WASHINGTON PUBLIC POWER
SUPPLY SYSTEM**

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EXECUTIVE SUMMARY

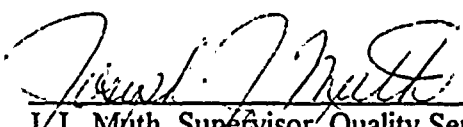
An independent audit of the WNP-2 Emergency Preparedness (EP) Program is performed at least once every twelve months as required by 10CFR 50.54(t). The audit team assessed specific areas as required by NUREG 0654. Additionally, effectiveness of previous corrective actions related to minimum staffing requirements and concerns with Post Accident Sampling System availability were reviewed. The results of the audit indicate that the WNP-2 Emergency Preparedness Program meets the applicable regulatory requirements within the areas assessed.

The Emergency Preparedness organization has continued to demonstrate a strong desire for self-improvement. This was illustrated by their performance of a self-assessment issued in February 1997 which identified several areas for enhancement. Quality agrees with the areas identified in the self-assessment and urges Emergency Preparedness to implement the recommendations.

The audit team observed the training drill performed by Team D on February 26, 1997, and noted several areas for improvement; primarily in the areas of drill control, communications, and personnel performance. One Problem Evaluation Request (PER) was issued due to observed difficulties in performing dose assessment in the Control Room.

Another area for improvement is the maintenance of Emergency Preparedness related facilities and equipment. The audit team determined there were inadequate controls in place to assure facilities and equipment are maintained as described in the Final Safety Analysis Report (FSAR). Two PERs were issued documenting less than adequate controls. One PER documents ineffective corrective actions taken to return an FSAR component to service. The second PER documents the lack of specific procedures/instructions for maintaining the license basis requirements for non-power block facilities.

Ten Quality Recommendations were issued as a result of this audit.


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PURPOSE AND SCOPE

This annual audit of Emergency Preparedness is required by Title 10 of the Code of Federal Regulations, Part 50.54(t).

Audit activities demonstrated that the WNP-2 Emergency Preparedness Plan and implementing procedures included the requirements of 10CFR50, Appendix E and met the intent of NUREG 0654. The following areas required by NUREG 0654, Section II.P.9 and implemented in WNP-2 Emergency Plan, Section 8.3 were assessed:

- Emergency Plan and Implementing Procedures
- Emergency Response Organization Training
- Readiness Testing - Exercises and Drills
- Facilities and Equipment
- Interfaces with State and Local Governments and Agencies

Additionally, the effectiveness of corrective actions associated with minimum staffing issues and Emergency Preparedness Self-Assessments were evaluated. A review of the Post Accident Sampling System availability concerns was also performed.

REPORT DETAILS

SECTION 1.0 - Emergency Plan and Implementing Procedures

The process for reviewing and approving the Emergency Plan was evaluated. The Emergency Plan is reviewed, updated, and approved as required. There is a predefined work activity in PASSPORT, "E-Plan Review," that is used to schedule and track this review. Although each annual review has coincided with a revision to the Plan, provisions exist to review the plan annually and "certify" this review, if the Plan is not being revised. The manual control process is used to distribute the plans to controlled copy holders, including the offsite agencies and the Nuclear Regulatory Commission (NRC).

At the request of EP management, the audit team compared the WNP-2 Emergency Plan and implementing procedures to the criteria in NRC Temporary Instruction 2515/134, "On-shift Dose Assessment Capability." The NRC instruction criteria evaluates a commitment to performing on-shift dose assessment using real time effluent and meteorological data at all times. Section 2.2 of the Emergency Plan states that "On-shift staffing....includes adequate numbers of qualified personnel to perform....dose assessments within time requirements." Revision 18 of the Emergency Plan does not specify which on-shift position executes dose assessment duties, but an in-process draft revision identifies this responsibility.

Section 5.1 of the Emergency Plan outlines assessment activities during declared emergencies, but does not commit to performing assessment activities at either the Unusual Event or Alert level. Therefore, the Emergency Plan does not fulfill the guidance in the

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NRC instruction since the Emergency Plan commits to the use of real-time data only at the Site Area or General Emergency, rather than at all times. The following recommendation is issued to address this concern:

QUALITY RECOMMENDATION (AU297-005-A)

Revise the E-Plan to clearly commit to the performance of dose assessment by on-shift personnel utilizing real-time meteorological and radiological effluent data at all times.

The NRC instruction criteria for implementing procedures for performing dose assessments specifies that procedures be in place to initiate dose assessment by on-shift personnel and that the procedures use real-time effluent and meteorological data. Implementing procedure Plant Procedure Manual (PPM) 13.10.1, "Control Room Operators and Shift Manager Duties," directs the performance of dose assessment and protective action recommendations by on-shift personnel upon detection of off-normal or abnormal radiological effluent releases. PPM 13.8.1, "Emergency Dose Projection System Operations," directs the use of the Quick Emergency Dose Projection System (QEDPS) in the Control Room for performing dose assessment. The procedure has a specific step (step 4.2.5) directing entry of meteorological data, but does not have a step directing entry of real-time radiological data. It appears that the step 4.2.3 allows entry of actual data, but if the procedure is followed verbatim, default data could be used instead of real-time data.

During the review of PPM 13.8.1, other areas for enhancement were also noted. Step 4.2.4 of PPM 13.8.1 requires the calculation of dose using a duration that incorporates releases that have already occurred. This may conflict with Emergency Plan guidance to make protective action recommendations based on the dose to be avoided by the action relative to the risk associated with implementing the action. Another enhancement would be to address the performance of dose assessment when unmonitored pathways are involved, i.e. steam line break with release through a blow-out panel.

To conform with the guidance in the NRC temporary instruction and to incorporate the above noted enhancements, the following recommendation is offered:

QUALITY RECOMMENDATION (AU297-005-B)

Revise PPM 13.8.1 to:

- *Require the use of real time radiological effluent data*
- *Account for releases that have already occurred*
- *Provide actions for unmonitored pathways*

SECTION 2.0 - Emergency Response Organization Training

The audit team evaluated the Emergency Response Organization (ERO) training program administration to determine if the guidance in the Emergency Plan was consistent with the implementing procedures. According to the Emergency Plan, essential personnel receive specialized initial training in the duties and responsibilities of the position and the

applicable procedures. Augmenting positions receive training as specified in the implementing procedures and the Emergency Preparedness Training Course Catalog. Position training requirements are identified in the Emergency Position Training Matrix included in the course catalog.

The Emergency Preparedness Course Catalog requires that Shift Technical Advisors (STAs) complete training on the Quick Emergency Dose Projection System (QEDPS), course code 82-EDP-0300-LP. Training records for 1996 were obtained for all active STAs. Two active STAs did not appear on the list as taking the QEDPS course. Discussions with Operations Training personnel revealed that these two STAs received dose projection training as part of the requalification program, course code LR-000-291X-XX. During the requalification cycle, the lesson plan used is the 82-EDP-0300-LP, but the method of tracking in PQD uses the requalification code. The course catalog should be updated to include the requalification course as meeting the requirements for dose projection training.

The audit team noted inconsistencies in the guidance for evaluation of training. The Emergency Plan, Section 8.6.1, identifies that initial specialized training for essential personnel will include written examinations. PPM 13.14.5, Emergency Response Organization and Training, Section 4.2.4.3 states that a written examination is normally required for initial training. Section 8.8 of the Emergency Plan describes the annual retraining program which identifies several options for training evaluation, which may include written examinations. PPM 13.14.5 does not discuss examinations for refresher training. There is no regulatory guidance requiring written examinations for training. It was noted that the lesson plan for the QEDPS training provides for approximately one hour of classroom instruction and one hour of hands-on training, which requires the completion of sign-off forms. Both lesson plans call for the use of a Job Performance Measure (JPM) as a means of evaluating performance rather than a written examination. The need for written examinations needs to be clarified in the Emergency Plan and consistently addressed in the implementing procedures.

Annual refresher training is required for all ERO personnel as described in PPM 13.14.5, Emergency Response Organization and Training, and is conducted either by classroom or mailout. The Emergency Position Training Matrix identifies which positions require classroom refresher training and which require mailout training. PPM 13.14.5 allows personnel identified as requiring mailout refresher training to receive credit for attending classroom refresher training.

Annual refresher training for ERO members assigned to the Joint Information Center (JIC) was evaluated to the above requirements. The Emergency Position Training Matrix identifies several JIC positions as requiring classroom training. However, the course description for ERO annual Refresher Training (82-ERO-0100-RT) does not identify JIC personnel as requiring this training. A review of the Plant Qualification Database (PQD), however, showed that JIC personnel were attending the ERO Annual Refresher Training. The course catalog should be updated to include JIC personnel in the ERO Annual Refresher Training course.

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The Annual ERO Refresher Training is usually provided to team members on the day of their team drill. Quality observation of this training and the subsequent drill revealed that a method for critiquing training is not provided to those attending the refresher training nor does the drill After Action Report form identify training session comments. Based on the comments from participants in the training, an opportunity to improve training and strengthen team involvement is lost by not soliciting training critiques.

Three training lesson plans reviewed contained a statement that instructors of the course must meet the requirements of Technical Training Procedure (TTP) 6.1.1. The Emergency Response Organization and Training Procedure (PPM 13.14.5, Section 4.2.13.3) states that instructor qualification requirements identified in TTPs will be used as a guide for Emergency Preparedness Training Instructors. Exceptions to these requirements may be authorized by the Corporate EP/IS Officer. The primary onsite and offsite instructors are not qualified to TTP 6.1.1 requirements. According to the Corporate EP/IS Officer, the EP Training Program was removed from the Technical Training Manual approximately two years ago. Thus, the instructors are not required to fully qualify to TTP 6.1.1 requirements. This requirement is being removed from Lesson Plans as they are revised and should be completed by the end of 1997.

Finally, the audit team noted that access to emergency training examinations is not secured. The filing cabinet containing the original examination records remained unlocked throughout the audit.

The above examples indicate a need to strengthen the administrative controls for the ERO training program. As a result, the following recommendation is issued:

QUALITY RECOMMENDATION (AU297-005-C)

Strengthen administrative controls of ERO training program. Specifically:

- *Ensure the EP Training Course Catalog accurately reflects the associated lesson plans*
- *Ensure methods of training evaluation are consistent with E-Plan*
- *Include JIC members in the course description for the ERO Refresher training*
- *Provide critique opportunity for pre-drill training sessions*
- *Ensure lesson plans accurately indicate instructor qualification requirements*
- *Maintain examinations in locked storage*

SECTION 3.0 - Readiness Testing

Section 3.1 - Exercises and Drills

The audit team observed performance of the Team D training drill conducted February 26, 1997. Audit members were stationed at the Emergency Offsite Facility, Technical Support Center, Operations Support Center, and the Control Room (simulator). The audit team also observed and participated in the post-drill player critique at each location.

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The audit team identified areas for improvement categorized as concerns in drill control, communications, questioning attitude, and personnel performance. Specific concerns are outlined in Appendix B of this audit.

These concerns were presented to Emergency Preparedness staff and discussed in detail. The most significant concern appeared to be the difficulties displayed by the STA in performing dose assessments, since a similar incident was documented as an exercise weakness by the NRC during the last evaluated exercise. The Corporate EP/IS Officer immediately sent an E-mail to the Operations Training Department requesting they investigate the observation and determine its validity. Training personnel interviewed all of the individuals present in the simulator as well as the STA and found the general consensus indicated improvements were needed in obtaining data to perform dose assessments. A questionnaire was sent to the other STAs to determine if additional training was necessary for all STAs or just the individual observed. The response from the other STAs indicated that they were familiar with the data and did not need additional training. As a result of the observed performance, Quality initiated the following PER.

PER 297-0183

A weakness was identified with the performance of offsite dose assessment during Team D ERO training drill.

To facilitate overall improvement in personnel performance during training drills, the following Quality Recommendations are issued:

QUALITY RECOMMENDATION (AU297-005-D)

Develop actions to address personnel performance problems identified during drills:

- *Provide a "Time Out" period in the middle of each drill to allow the ERO Team a real-time opportunity to be self-critical of individual performances and to provide the Controller/Evaluator additional opportunities to identify, coach, and correct areas of individual performance for the remainder of the drill.*
- *Individual ERO performers who have repeat performance problems should be given the assignment of observing and interacting with a peer that performs their ERO position on another ERO Team in a follow-up drill.*

QUALITY RECOMMENDATION (AU297-005-E)

Ensure training provided for controller/evaluator performance during drills clearly defines the expectation for performing on-the-spot corrections. Ensure drill players know the controllers/evaluators role.

Other concerns identified by Quality, that are not addressed by a specific PER or Recommendation, are contained in the Drill Report 97-1 and will be tracked for corrective action by the Emergency Planning Activity Scheduling System (EPASS).

Section 3.2 - Drill and Exercise Program

The 1996 Quarterly Training Drill 96-04 Drill Report for ERO Team A was reviewed relative to scope and objectives. The list of each objective for the drill contained a reference to the WNP-2 Six-Year Plan. The Plan incorporates all the objectives from the FEMA and NUREG-0654 six year plan.

The 1997 Quarterly Training Drill 97-01 Drill Report was reviewed and found to contain a list of Onsite Objectives that referenced objective numbers that correlated to the WNP-2 Six-Year Plan. Quality observations of Drill 97-01 were used to verify the referenced elements of the WNP-2 Six-Year Plan as listed in the Drill report.

All corrective actions identified from drill deficiencies are tracked for implementation by either the Plant Tracking Log (PTL) or by the Emergency Planning Activity Scheduling System (EPASS). The player training held prior to the Team D Drill on February 26, 1997 contained corrective actions from previously identified drill deficiencies.

Quarterly ERO team training and drills are used to assure individuals who miss their annual drill are rescheduled. An Emergency Preparedness staff member reviews the Training and Qualification Report monthly to determine which ERO members need to be scheduled for another drill to maintain their qualifications. No discrepancies were noted with this process.

SECTION 4.0 - Facilities and Equipment

The audit team assessed whether emergency facilities and equipment identified by NUREG-0696 and described in the FSAR as supporting emergency response has been adequately provided and maintained. This assessment determined that sufficient equipment and facilities are in place to support emergency response, but maintenance of these items has not been adequate.

Drains for the Backup PASS chemistry laboratory and contamination shower at the Plant Support Facility (PSF) are directed to an underground, monitored lift station. The lift station contents are pumped to the sanitary waste treatment facility. Section 12.5.2.2.b of the FSAR requires radioactive liquid laboratory wastes discharged to the sanitary sewage treatment facility be in compliance with the requirements of 10 CFR 20.2003. A liquid waste radiation monitor at the PSF lift station functions to alert the PSF staff to disable lift station pumps if a discharge of radioactive liquids occurs. This monitor was taken out of service in April 1993 due to "spiking" problems. PER 296-0500 was initiated in June 1996 to document the inoperability of the monitor. Nine months after the initiation of the PER, the audit team discovered that the monitor has remained out of service. Although Corrective Action 1 of the PER initiated a Work Request to repair the monitor, no action has been taken. The PER was subsequently closed as being complete. As a result of ineffective corrective actions associated with PER 296-0500, the following PER was issued:

PER 297-0198

Corrective actions for the effluent monitor at the PSF lift station did not ensure the monitor was repaired.

While evaluating the status of the effluent monitor, the audit team became aware of prior modification work at the PSF that ultimately impacted the operation of the effluent monitor. While digging to remove a diesel storage tank in June 1996, underground conduit housing the electrical supply for the effluent monitor was disrupted which disconnected the electrical supply to the monitor. This was reported to the supervisor in charge of the tank removal. However, there was no attempt to determine if the wiring was functional or what equipment it supplied. The conduit was subsequently repaired without the electrical supply being restored to the lift station monitor. During the course of this audit, actions were taken to repair the wiring. The audit team evaluated the process used to control Facilities work activities. The Facilities Service Request (FSR) is used to perform maintenance or modification to facilities equipment. Facilities Maintenance Instructions (FMIs) are used describe how the FSR is used. Although the FSR form has check off blocks to indicate if a 10CFR50.59 is required; there is no guidance in the FMIs identifying when this block should be checked. PPM 1.3.43, "Licensing Basis Impact Determination," requires that a process be in place to evaluate the impact on the licensing basis from various activities associated with design and operation of the plant. This concern was discussed with the Facilities Manager who agreed that the current controls were inadequate. As a result of this activity, the following PER was issued:

PER 297-0205

Instructions/Procedures do not exist which maintain the licensee basis requirements for non-power block facilities.

PPM 13.14.4 (Emergency Equipment) describes inspection, inventory, and functional testing of emergency equipment and supplies which are maintained for emergency operations. Implementation of this procedure is supported by predefined PASSPORT work activities identifying the frequency of the task and the responsible organization. The predefined tasks outlined in PASSPORT provide reasonable assurance that equipment and facilities are functional at the frequency checked. However, a potential weakness was identified in this area. Some equipment such as faxes, copiers, status boards, telephones, etc. is shared with other facilities and departments. Although equipment can be verified available and operational by PPM 13.14.4, the same piece of equipment used during routine business activities can fail. Organizations supporting the repair do not have a method in place to ensure EP is notified of the equipment status. An example was noted during the audit where a power outage was scheduled which affected the Operations Support Center (OSC). The only way EP was notified was through the Telecommunications personnel who had been notified. To enhance Emergency Preparedness controls of their facilities and equipment, the following recommendation is offered:

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QUALITY RECOMMENDATION AU297-005-F

Implement a method to notify EP when shared equipment fails or requires maintenance.

The audit team also reviewed installed and portable radiological monitoring equipment associated with the EOF ventilation and determined that there is sufficient radiological protection for EOF personnel in accordance with NUREG-0696, Section 4.5.

SECTION 5.0 - Interfaces with State and Local Governments and Agencies

The audit team reviewed the 1996 Department of Health audit and the 1996 FEMA major exercise report. The Department of Health audit performed June 28, 1996, contained a recommendation for training. "Emphasis should be placed on training MUDAC and EOF management to be more aware of the needs of State and local agencies...." A review of the Plant Tracking Log indicated that this recommendation was not entered into the database until February 1997 with a scheduled completion date of March 31, 1997. The FEMA 1996 major report identified three Areas Requiring Corrective Actions (ARCAs) that identify training to be provided by the Supply System. All ARCAs are tracked by Emergency Preparedness personnel using their internal tracking system, but they did not recognize the three ARCAs that required Supply System action. In addition, the ARCAs were not discussed or included in the material provided in the pre-drill annual refresher training. These delays in addressing recommendations provided by outside agencies led to lost opportunities to incorporate recommendations in training prior to several drills and one major exercise. As a result, the following recommendation is issued:

QUALITY RECOMMENDATION (AU297-005-G)

Use PTL to track FEMA recommendations impacting the Supply System and ensure timely implementation of recommendations provided by outside agencies

Interfaces with outside agencies are described either in a contract with the Supply System, an Agreement Letter, or the agency's own Emergency Plan. Supporting plans and contracts with outside agencies are identified in Appendix 1 of the Emergency Plan. Agreement letters which formalize commitments between the Supply System and outside agencies are identified in Appendix 4 of the Emergency Plan. An annual review of each plan, contract, or agreement letter is required. The process for this review is described in PPM 13.14.9, Maintaining Emergency Preparedness. Item 5 of Attachment 6.1 to PPM 13.14.9 identifies the review of Letters of Agreement to be accomplished when the Emergency Plan is revised or certified. This item does not specifically address the review of plans and/or contracts. However, there are PASSPORT tasks requiring an annual review of each of the documents identified in Appendix 1 or Appendix 4 of the Emergency Plan. The audit team verified that the annual reviews were performed as required using the PASSPORT task. However, PPM 13.14.9 should be revised to include the annual review of plans and contracts in addition to the agreement letter review.

PPM 13.14.9 also requires that the State, County, and Department of Energy be contacted annually to solicit their review of the WNP-2 Emergency Plan. This review should be

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documented according to the procedure. There is no regulatory basis or Emergency Plan requirement to solicit outside agency review; however, it is good business practice. The audit team could not find any documentation of this review. As a result of inconsistencies identified in PPM 13.14.9, the following recommendation is issued:

QUALITY RECOMMENDATION (AU297-005-H)

Revise PPM 13.14.9 to clarify annual reviews:

- *Include the annual review of plans and contracts in addition to agreement letters*
- *Evaluate the need to document outside agency review of WNP-2 Emergency Plan*

The public education and information program was evaluated to the Emergency Plan requirements. The Emergency Information calendar that is distributed annually was reviewed and found to contain the information specified in Section 9.1.1 of the Emergency Plan.

SECTION 6.0 - Effectiveness of Previous Corrective Actions

Section 6.1 - On-Shift Staffing

The audit team reviewed PERs 296-0633, 297-0110, and Quality Surveillance Report 296-054 for elements of ineffective corrective actions. All of these documents are related to Emergency Preparedness Health Physics staffing requirements.

Quality Surveillance 296-054 was conducted June 4 through July 1, 1996, and addressed a procedural discrepancy with PPM 1.3.1, "Conduct of Operations," and Health Physics (HP) technician staffing requirements. The Emergency Plan and NUREG-0654 both establish the required number of on-shift HP technicians as one for in-plant surveys and two for protective actions (three total). According to the WNP-2 Emergency Plan and NUREG-0654, the two HP positions required for protective actions may be filled by other shift personnel. PPM 1.3.1 and PPM 13.14.5 incorrectly allowed all the on-shift HP positions to be filled by other shift personnel. This discrepancy was communicated to management in Radiation Protection and Emergency Preparedness Departments who took corrective action to revise PPM 1.3.1 and PPM 13.14.5 on June 25, 1996.

PER 296-0633 was written by Emergency Preparedness on August 13, 1996, when staffing problems with HP technicians surfaced during an unannounced drill. Of the fourteen HP technicians contacted by the automatic notification system, none appeared to have responded to the drill. Eight HP technicians are required to fill Essential Emergency Response positions.

After writing the PER, Emergency Preparedness personnel discovered that two HP technicians were enroute to the site for their normal shift at the time of the notification drill and could not respond to the auto-dialer queries. Another HP technician received the notification and initially responded incorrectly, but recognized the error and called the site to offer his availability. Three HP technicians were on site and three other HP technicians had correctly responded to the telephone notification. In total, nine HP technicians were available to fill the eight essential positions. However, a potential problem did exist due to planned reductions in force which could impact the ability to staff the essential positions. Corrective actions were added to the

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PER to identify qualified individuals to assume the HP technician responsibilities during emergencies, provide additional training for the position, and place the qualified people in the ERO HP Technician manpower pool. At the time of this audit, the additional training had not been completed for the identified HP Technician ERO responders. The placement of the individuals on the ERO responder list without providing the initial training is the subject of a potential Notice of Violation from the NRC.

PER 297-0110, which was written on February 2, 1997, as a result of the Emergency Preparedness Self-Assessment, was a repeat problem related to PPM 1.3.1 staffing requirements. The staffing requirements of PPM 1.3.1 only listed the two HP technician positions required for protective actions. The HP technician required for surveys had been incorrectly omitted in the June 25, 1996 revision of PPM 1.3.1.

The audit team investigated how this oversight occurred during the revision of PPM 1.3.1. The June 1996 revision to PPM 1.3.1 was written by an Operations procedure writer and reviewed by a reviewer who was not completely familiar with the problem and who did not provide a copy of the proposed procedure revision to Emergency Preparedness for review. Emergency Preparedness is not routinely required to review PPM 1.3.1 revisions and in this case, did not. Another consideration to the cause of this problem was found in Surveillance Report 296-054 where it was mentioned that the Radiation Department planned to reduce the number of HP technicians on-shift to two following the June 30, 1996, reduction in force. It appears the resulting procedure revision to PPM 1.3.1 was an attempt to institute this plan.

On the surface, PER 297-0110 seemed to provide an example of ineffective Emergency Preparedness corrective action. However, it is important to note that this PER was discovered and written by Emergency Preparedness as a result of their internal self-assessment process. The self-discovery of the error in revising PPM 1.3.1 and the proposed corrective action options for PER 297-0110 indicate an adequate performance by Emergency Preparedness in problem identification and resolution. Quality is assigned to evaluate the disposition of PER 297-0110 and will continue to monitor the PER through implementation.

Section 6:2 - Self-Assessment Program

Emergency Preparedness Self-Assessment reports dated February 29, 1996, and February 21, 1997, and the Emergency Preparedness Instruction EPI-04, "Self-Assessment Program" were reviewed.

Personnel from South Texas Project and Trojan Nuclear Plant were utilized in the 1996 Emergency Preparedness Self-Assessment. Personnel from Grand Gulf Nuclear Station, San Onofre Nuclear Generating Station, Washington State Department Of Health and Emergency Management, and Franklin County Emergency Management were utilized for the 1997 Emergency Preparedness Self-Assessment. The guidance of EPI-04 was used in performing the self-assessments. It was also noted that there are no requirements in EPI-04 to use industry peers or Federal, State, or County Emergency Planning personnel in the WNP-2 annual Emergency Preparedness Self-Assessments. Therefore, Quality views the use of utility/agency peers on the Self-Assessments as a strength that should be continued.

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A total of 31 detailed recommendations (no PERs) were issued from the 1996 Emergency Preparedness Self-Assessment covering a broad area of topics from each of the areas of focus. A total of 29 detailed recommendations and three PERs resulted from the 1997 Emergency Preparedness Self-Assessment. The use of outside agency Emergency Planners and the depth and detail of the recommendations from the self-assessments indicate an attitude and desire on the part of the WNP-2 Emergency Preparedness organization for improvement through the self-assessment process.

Other elements of the Emergency Preparedness Self-Assessment Program as outlined by EPI-04 were examined. Trending guidance given in EPI-04 indicates that ongoing day to day self-assessment activities will be trended to verify program implementation is being successfully accomplished. Facility Walkdown Checklists (Attachment 4 of EPI-04) from the months of January and February 1997 were reviewed and indicated weekly walkdowns and equipment checks for ERO facilities were being performed. Additionally, a current Emergency Planning Activity Scheduling System (EPASS) print out was examined and verified to contain significant drill player comments. Although the indications were that Emergency Preparedness management effectively monitored performance to the existing requirements of EPI-04, no formal trending, as indicated by the EPI-04 section titled "Trending Guidance," is being performed. As a result, the following Recommendation is offered for improvement:

QUALITY RECOMMENDATION (AU297-005-I)

A formal trending process should be implemented utilizing the elements listed in EPI-04 "Trending Guidance," or this section of the instruction should be revised to reflect the current methods of monitoring performance in the listed areas.

SECTION 7.0 - Post Accident Sampling System Availability

At the request of the Emergency Preparedness supervision, the audit team reviewed the availability of the Post Accident Sampling System. PER 297-0060 was initiated on January 21, 1997, to document the system was inoperable. The audit team discussed PASS availability with the System Engineer and the System Engineering Supervisor. Data for 1995, 1996, and 1997 (to date) for PASS out-of-service time was reviewed. The total out-of-service time for that period was 45 days, which included 25 days in 1995 and no outage time in 1996. The remaining out of service time in 1997 is associated with PER 297-0060 repair. Waiting for the replacement parts accounted for the majority of the time in 1997.

The issue of work prioritization for PASS work orders was considered an important factor in minimizing the out-of-service time. Discussions between System Engineering, Planning and Scheduling, and Maintenance resulted in increased commitment to support the current objective of PPM 1.11.6, which is to ensure PASS is available when needed.

The availability of the backup PASS laboratory was also evaluated. Although the facility is equipped to function in the event the in-plant PASS system becomes unavailable, there are no specific procedures describing what supplies and equipment are required to be

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maintained in the laboratory, nor how often the equipment should be checked, calibrated, or otherwise maintained. As a result, the following recommendation is issued:

QUALITY RECOMMENDATION (AU297-005-J)

Establish criteria to maintain the backup PASS laboratory in a state of readiness.

APPENDIX A - PERSONNEL CONTACTED DURING THE AUDIT

R.M. Abdella, Lead, Training
B.M. Adami, System Engineer (ERO Team D)
T.W. Albert, Supervisor, Planning+
A.L. Alexander, Chemistry Technical Specialist (ERO Team D)
J.J. Ames, Administrative Assistant (ERO Team D)
D.K. Atkinson, Manager, Quality++
P.T. Bagan, Training Specialist
L.W. Ball, Emergency Planner+
R.J. Barbee, Manager, System Engineering+
W.H. Barley (ERO Team D)
D.L. Beecher, Chemistry Technician
D. A. Bennett, Supervisor, Chemistry Operations
M.B. Blake, Procedure Writer (ERO Team D)
E.F. Boler III, I&C Trainer (ERO Team D)
I.M. Borland, Supervisor, Radioactive Material Control (RMC) (ERO Team D)
O.J. Brooks, Training Specialist
D.W. Culver, Manager, Facilities++
W.S. Davison, Work Week Leader (ERO Team D)
G.V. Dockter, Technical Specialist (ERO Team D)
A.J. Fahrenstock, Supervisor, Training
L.C. Fernandez, Manager, Licensing++
J.M. Frisco, Work Week Leader
S.F. Ghbein, Engineer (ERO Team D)
J.A. Gloyn, Supervisor Fitness for Duty (FFD) (ERO Team D)
S.P. Grundhauser, Supervisor, Administrative Services (ERO Team D)
P.W. Harness, Engineering Supervisor (ERO Team D)
R.W. Hayden, Training Specialist
D.B. Holmes, Emergency Planner
P.J. Inserra, Lead, Improved Technical Specifications
J. P. Ittner, Emergency Planner+ ++
D.K. Kaopuiki, Hot License Coordinator (ERO Team D)
D.A. Kerlee, Quality Programs (ERO Team D)
S.S. Kim, Quality Services
D.L. King, Training Specialist
A.F. Klauss, Emergency Planner+
G.J. Kucera, Vice President Administration/Chief Financial Officer++
D.E. Larson, Training
L.A. Leingang, Supervisor, Facilities Planning
R. W. Libra, Supervisor, System Engineering
T.S. Love, WNP-2 Plant Support Services Manager+
J.K. Lovejoy, Leader, Outage (ERO Team D)
T.L. Meade, Manager, Engineering Programs (ERO Team D)
T.C. Messersmith, Supervisor, Maintenance Training (ERO Team D)

APPENDIX A - PERSONNEL CONTACTED DURING THE AUDIT (continued)

L.A. Mix, Administrative Assistant (ERO Team D)
M.M. Monopoli, WNP-2 Operations Manager+
R.A. Morris, Supervisor, Electrical Maintenance (ERO Team D)
G.A. Moyer, Craft Supervisor (ERO Team D)
J. J. Muth, Supervisor, Quality Services
H.L. Nielson, Supervisor, Chemistry
J.A. Pankoke, Technical Support Specialist (ERO Team D)
M.G. Pratt, Procedures Lead
L.A. Pritchard, Senior Health Physicist (ERO Team D)
L.A. Rathbun, Principal Health Physicist (ERO Team D)
G.J. Reed, Corporate Emergency Preparedness/Industrial Safety, Health Officer++
S.J. Rejniak, Training Specialist (ERO Team D)
R.J. Reynolds, H.P. Technician
T. A. Rychlyk, Staff Engineer
G.D. Sanford, WNP-2 Maintenance Manager++
K.E. Shoemaker, Supervisor, Maintenance Services
G.O. Smith, WNP-2 Plant General Manager+
L.F. Studer, H.P. Technician
D.A. Swank, Manager, Regulatory Affairs
J.D. Teachman, Principal Engineer (ERO Team D)
S.L. Washington, Business Planner (ERO Team D)
G. Weimer, Licensing Requalification Coordinator
R.C. Winslow, Supervisor, H.P. Operations
S. Wormington Jr., Business Representative (ERO Team D)
J.E. Wyrick, Assistant to the WNP-2 Plant General Manager++
C.E. Young Jr., Technical Specialist (ERO Team D)

+ Attended Entrance Meeting

++ Attended Exit Meeting

APPENDIX B - DRILL OBSERVATIONS

Control of Drill Concerns:

- Drill Messages 1 and 2, establishing initial conditions, were not provided to key players in all centers resulting in later confusion over equipment/system status.
- Problems with the scenario program caused an event that was supposed to transpire over 40 minutes to be compressed to 40 seconds. This resulted in conflicting data being provided to the emergency centers and confusion as to what data should be used for emergency classifications and dose assessments.
- The audit team noted very little coaching provided by the controllers to drill players. Some players interviewed expressed concern that they were not coached even when experiencing difficulties and felt an opportunity to improve their skill was lost. Others were not clear on when they could ask for help and who was their interface.
- Confusion was observed in many of the centers over what positions were being staffed and what positions were simulated.
- Problems with the Automated Notification System resulted in at least three craft workers responding from home.

Communications Concerns:

- Briefings in the EOF were not timely, did not have adequate content, and did not assure all personnel were attentive.
- Three way communications were not used and status boards were not maintained in the EOF and TSC.
- The information coordinator in the Simulator went offline several times to gather additional information.
- Transfer of the control of the Equipment Operators from the Control Room to the OSC was not clearly communicated.

Questioning Attitude

- Some data and equipment status was not questioned in the EOF and TSC even when staff members felt the information was inaccurate.
- Responsibility for dose assessment was not clearly understood by Simulator and EOF staffs.
- Data discrepancies between the Field Team data, Simulator data, and EOF readings were never clearly explored.

APPENDIX B - DRILL OBSERVATIONS (continued)

Personnel Performance

- The STA exhibited difficulties in performing dose assessment activities. Due to functions (i.e. core damage assessment).
- The details of operating the FAX machine were not well known by Simulator (STA) and OSC (Team Tracker) personnel.
- A sense of urgency was not demonstrated by EOF and TSC staffs. Effective command and control was not demonstrated in the EOF or Simulator and the TSC command and control could have been more assertive.
- OSC repair team dispatch times did not meet the goal of less than 10 minutes.
- The OSC Manager declared the OSC activated when it was not fully manned.
- Problems were encountered with the notification process: the upgrade to an Alert status was not timely such that responders received an UE message not to respond.

APPENDIX C - REFERENCES

10CFR50.47, Emergency Plans
10CFR50.54, Conditions of Licenses
10CFR50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
NUREG 0654, FEMA REP-1, Rev. 1; Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
WNP-2 Emergency Preparedness Plan, Rev 18
WNP-2 Emergency Preparedness Program Six Year Plan
NRC Inspection Procedure 82301, "Evaluation of Exercises for Power Reactors"
NRC Inspection Procedure 82206, "Knowledge and Performance of Duties"
NRC Temporary Instruction 2515/134, "Licensee On-Shift Dose Assessment Capabilities"
Emergency Dose Assessment System Users Manual
Drill and Exercise Manual for WNP-2, Rev 2
Volume 13 series of Emergency Plan Implementing Procedures
PASSPORT Predefined Database
Problem Evaluation Requests (PERs):
PER 296-0500
PER 296-0633
PER 297-0060
PER 297-0110
EPI-04, Self-Assessment Program (Rev. 5/15/96)
Emergency Preparedness Self-Assessment report dated 2/29/96
Emergency Preparedness Self-Assessment report dated 2/21/97
Quality Surveillance 296-054, "Health Physics Technical Emergency Planning Staff"
Emergency Planning Instruction EPI-02, "Emergency Planning Activity Scheduling System"
Emergency Preparedness Training Course Catalog, Revision 2
Lesson Plan 82-EJI-P100-RT
Lesson Plan 82-EOS-C100-RT
Lesson Plan 82-EEO-0200-LP
Lesson Plan 82-EOS-P104-LP
Lesson Plan 82-EJI-P100-LP
Lesson Plan 82-EDP-0300-LP
Lesson Plan 82-EFA-0100-LP
INPO Good Practice, EP-801
INPO 90-015, Section EP-8
1996 WNP-2 Performance Self-Assessment, Appendix B
1995 Performance Enhancement Strategy, Section 5.3B
FEMA - 1996 Major Exercise Report
Washington State Department of Health Audit, dated 6/28/96
PPM 1.11.6, Post Accident Sample System Program (Rev 7)
Health Physics Instruction (HPI) 7.48, Calibration and Operation of Liquid Monitor, Rev 5
Health Physics Instruction (HPI) 7.45, Eberline Model RMS II Calibration, Rev 4
Facilities Maintenance Instructions Manual

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-A
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Revise the Emergency Plan to clearly commit to the performance of dose assessment by on-shift personnel utilizing real-time meteorological and radiological effluent data at all times.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-B
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Revise PPM 13.8.1 to:

- Require the use of real time radiological effluent data
- Account for releases that have already occurred
- Provide actions for unmonitored pathways

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-C
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Strengthen administrative controls of ERO training program. Specifically:

- Ensure the EP Training Course Catalog accurately reflects the associated lesson plans
- Ensure methods of training evaluation are consistent with E-Plan
- Include JIC members in the course description for the ERO Refresher training
- Provide critique opportunity for pre-drill training sessions
- Ensure lesson plans accurately indicate instructor qualification requirements
- Maintain examinations in locked storage

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-D
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Develop actions to address personnel performance problems identified during drills:

- Provide a "Time Out" period in the middle of each drill to allow the ERO Team a real-time opportunity to be self-critical of individual performances and to provide the Controller/Evaluator additional opportunities to identify, coach, and correct areas of individual performance for the remainder of the drill.
- Individual ERO performs who have repeat performance problems should be given the assignment of observing and interacting with a peer that performs their ERO position on another ERO Team in a follow-up drill.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-E
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Ensure training provided for controller/evaluator performance during drills clearly defines the expectation for performing on-the-spot corrections. Ensure drill players know the controllers/evaluators role.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-055
RECOMMENDATION NUMBER: AU297-055-F
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Develop a method to notify EP when shared equipment fails or requires maintenance.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

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QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-G
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Use PTL to track FEMA recommendations impacting the Supply System and ensure timely implementation of recommendations provided by outside agencies.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-H
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Revise PPM 13.14.9 to clarify annual reviews:

- Include the annual review of plans and contracts in addition to agreement letters
- Evaluate the need to document outside agency review of WNP-2 Emergency Plan

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT AUDIT 297-005

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-I
DATE: March 28, 1997
ORGANIZATION: Emergency Preparedness
PERSON CONTACTED: G. J. Reed
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

A formal trending process should be implemented utilizing the elements listed in EPI-04 "Trending Guidance," or this section of the instruction should be revised to reflect the current methods of monitoring performance in the listed areas.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

QUALITY DEPARTMENT RECOMMENDATION

EVALUATION NUMBER: AU297-005
RECOMMENDATION NUMBER: AU297-005-J
DATE: March 28, 1997
ORGANIZATION: Chemistry
PERSON CONTACTED: D. A. Bennett
RESPONSE DUE DATE: May 27, 1997
AUTHOR: K. M. Gunter

Quality Recommendation

Establish criteria to maintain the backup PASS laboratory in a state of readiness.

RESPONSE: *

*The response should address action to be taken and proposed completion date. If no action is deemed necessary, the logic for this conclusion should be presented.

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4.0 PROCEDURE

4.1 CRS/Shift Manager/Emergency Director Responsibilities for Localized Evacuations

If conditions exist requiring localized evacuation, initiate localized evacuation by performing steps outlined in Attachment 5.1.

4.2 Emergency Director Responsibilities for Protected Area Evacuation:

4.2.1 Determine if any of the extenuating conditions listed below, or other conditions which might preclude safe evacuation, are present:

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

4.2.2 If it is determined that a "safe" evacuation is possible, initiate Protected Area evacuation when a Site Area Emergency or General Emergency is declared, or in response to any of the following conditions:

1. General area radiation levels outside of a Radiologically Controlled Area exceed 5 mrem/hr indicating a loss of control of radioactive material and the threat cannot be confined to a well-defined area.
2. Unidentified airborne radioactivity exceeds 0.3 DAC (0.3 DAC equates to approximately 750 ccpm on a 40 ft³ air sample in the field) which is attributed to a loss of control of radioactive material.
3. An uncontrolled toxic gas leak (originating either onsite or offsite) where the hazard is not confined to a localized area.

4.2.3 Determine if any areas of the plant should be avoided during the evacuation.

4.2.4 Determine, if necessary, any other special protective measures which should be taken by plant evacuees.

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- 4.2.5 Determine the appropriate evacuation route and assembly area in accordance with the table below:

Condition A: The wind direction is away from the Alternate Access Point (AAP), the west parking lots, and the PSF. Wind directions and a site map showing Condition A evacuation route and assembly area are presented in Attachment 5.2.

Condition B: The wind direction is toward the AAP, the west parking lots, and the PSF. Wind directions and a site map showing Condition B evacuation route and assembly area are presented in Attachment 5.3.

Parameter	Condition A	Condition B
Evacuation Route	Out AAP parking lot to PSF by any available means.	Out AAP parking lot, north around plant to ROC Warehouse (Supply System Headquarters) by any available means.
Assembly Area	Plant Support Facility (Health Physics Center)	Richland Office Complex Warehouse - Supply System Headquarters

- 4.2.6 If a security event or other unforeseen condition prevents or alters implementation of these preplanned evacuation plans, designate alternate exit point(s) and assembly area(s), and revise the public address announcements accordingly.
- 4.2.7 Perform steps in Attachment 5.2 for Condition A, Protected Area Evacuation. Perform steps in Attachment 5.3 for Condition B, Protected Area Evacuation.
- If the PA announcement is made from the Control Room, use the PA system override switch for announcements. Return the switch to the normal position when done.
 - If the EOF Manager is the Emergency Director, coordinate with the TSC Manager to make PA announcements using the PA microphone in the TSC.
- 4.2.8 Direct the Radiation Protection Manager provide Health Physics coverage at the designated plant exit location portal monitors and at the Protected Area exit point.
- 4.2.9 Consider the need to implement PPM 13.5.3 actions for evacuation of the Exclusion Area/Nearby Facilities.

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4.3 Security Supervisor Responsibilities

- 4.3.1 The preferred method of site exit uses the normal exit protocol. If desired, the gate between the egress turnstiles at the AAP can be opened to expedite personnel exit.
- 4.3.2 If the gate between the turnstiles is opened, collect site badges and, as quickly as possible, log the personnel offsite.

4.4 Radiation Protection Manager Responsibilities

- 4.4.1 Dispatch HP technicians to the portal monitors at the designated plant exit location to provide instructions to evacuating personnel as outlined below, and assist in personnel monitoring as necessary.
 - a. If personnel were in the Radiologically Controlled Area, but not in a contaminated area and not involved in a radiologically contaminating incident, personnel monitoring is not necessary.
 - b. If personnel were in a contaminated area, remove protective clothing (if not already removed), and perform personnel monitoring at Access Control. If contamination is found, contact the RPM at the TSC at Ext. 2852 for further instructions.
- 4.4.2 Inform the Radiological Emergency Manager (REM) if personnel or vehicle monitoring or decontamination is necessary for evacuating personnel (Condition B Evacuation).

4.5 Radiological Emergency Manager Responsibilities

Implement the actions of PPM 13.7.5 as necessary to conduct offsite assembly area monitoring and decontamination operations at ROC Warehouse if that is the designated assembly area (Condition B Evacuation).

5.0 ATTACHMENTS

- 5.1 WNP-2 Public Address Emergency Message Format-Localized Evacuation
- 5.2 WNP-2 Public Address Emergency Message Format-Protected Area Evacuation - Condition A and Site Map and Evacuation Route
- 5.3 WNP-2 Public Address Emergency Message Format-Protected Area Evacuation - Condition B and Site Map and Evacuation Route

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WNP-2 PUBLIC ADDRESS EMERGENCY MESSAGE FORMAT
LOCALIZED EVACUATION

1. SOUND ALERTING TONE BEFORE ANNOUNCEMENT

____ Localized Evacuation (Sound Alerting Tone)
Sound tone for 10 seconds before making the announcement.

2. ANNOUNCE EVACUATION INSTRUCTIONS, HAZARDS TO AVOID

"Attention all personnel. Attention all personnel. Due to (_____) state reason
all personnel are to evacuate the (_____) state the localized area to be evacuated

Other special instructions, areas to avoid, etc.: _____

All other plant personnel continue normal activities until instructed otherwise."

3. REPEAT STEPS 1 AND 2

4. CALL SECONDARY ALARM STATION (SAS)

Call ext. 2230 and direct the Duty Officer to announce, and repeat at least twice, the above message(s) over the Maintenance and Security radio channels.

5. INITIAL ANNOUNCEMENT MADE BY: _____

DATE/TIME: _____ FROM: _____

6. REPEAT THE ALERTING TONE AND ANNOUNCEMENT

Repeat Steps 1, 2 & 3 approximately every 10 minutes until evacuation is complete.

7. RECORD FOLLOWUP ANNOUNCEMENTS

Record the times that followup announcements were made on the reverse side of this form and attach completed form to your After Action Report.

Attachment 5.1

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WNP-2 PUBLIC ADDRESS EMERGENCY MESSAGE FORMAT
PROTECTED AREA EVACUATION - CONDITION A AND SITE MAP
AND EVACUATION ROUTE

CONDITION A

1. SOUND ALERTING TONE BEFORE ANNOUNCEMENT

____ Protected Area Evacuation (Sound Alerting Tone)
Sound tone for 10 seconds before making the announcement.

2. ANNOUNCE EVACUATION & ASSEMBLY INSTRUCTIONS

CONDITION A EVACUATION:

"Attention all personnel. Attention all personnel. An evacuation of the WNP-2 Protected Area has been ordered. All emergency response personnel report to your emergency center. All other personnel exit the plant through the RCA access point on the west side of the plant and proceed rapidly out of the Protected Area through the Alternate Access Point. Proceed by any available transportation to the Health Physics Center/ambulance bay in the lower level of the Plant Support Facility."

3. REPEAT STEPS 1 AND 2

4. CALL SECONDARY ALARM STATION (SAS)

Call ext. 2230 and direct the Duty Officer to announce, and repeat at least twice, the above message over the Maintenance and Security radio channels.

5. INITIAL ANNOUNCEMENT MADE BY: _____

DATE/TIME: _____ FROM: _____

6. REPEAT THE ALERTING TONE AND ANNOUNCEMENT

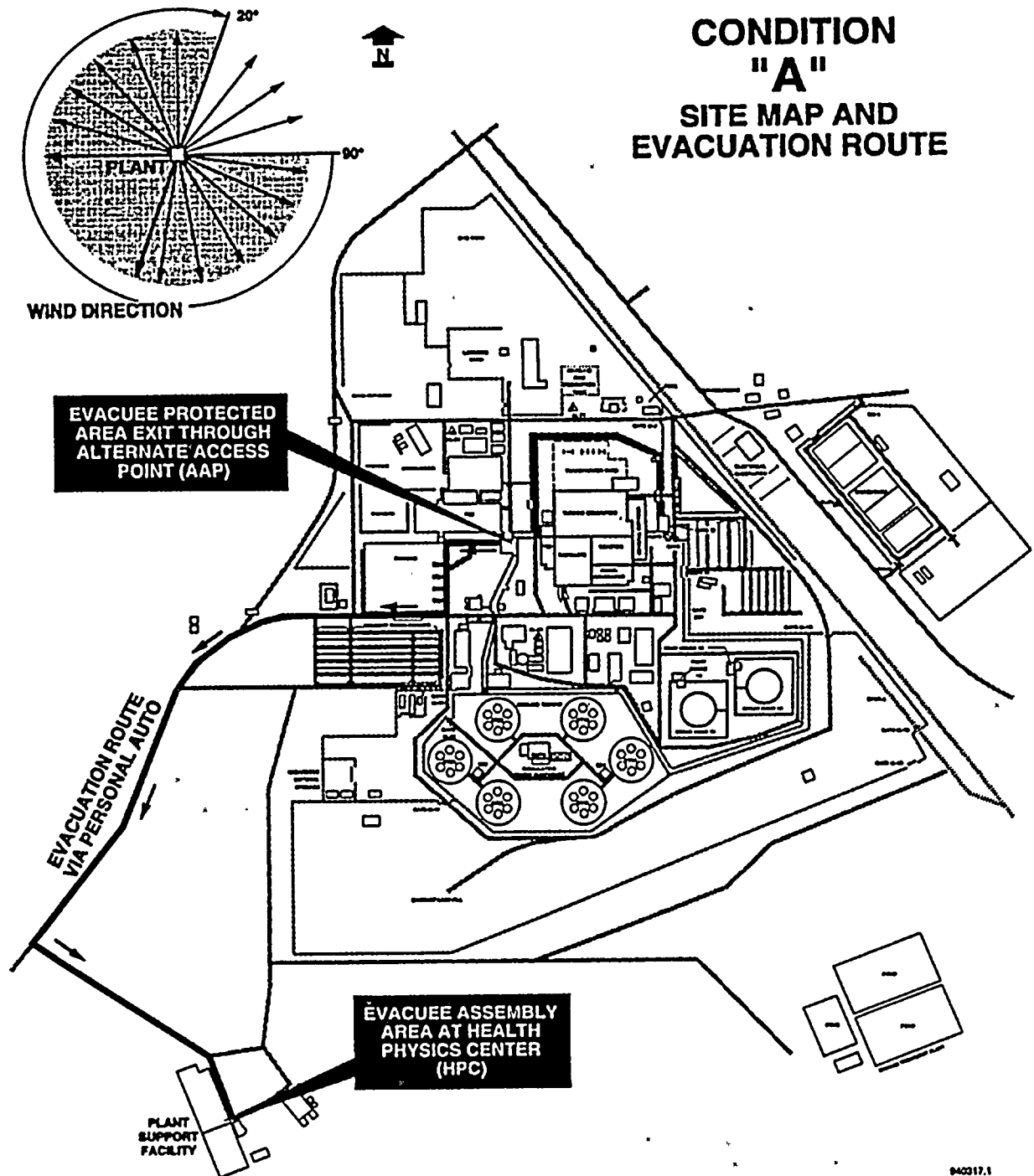
Repeat Steps 1, 2 & 3 approximately every 10 minutes until evacuation is complete.

7. RECORD FOLLOWUP ANNOUNCEMENTS

Record the times that followup announcements were made on the reverse side of this form and attach completed form to your After Action Report.

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WNP-2 PUBLIC ADDRESS EMERGENCY MESSAGE FORMAT
PROTECTED AREA EVACUATION - CONDITION B AND SITE MAP AND
EVACUATION ROUTE

CONDITION B

1. SOUND ALERTING TONE BEFORE ANNOUNCEMENT

____ Protected Area Evacuation (Sound Alerting Tone)
Sound tone for 10 seconds before making the announcement.

2. ANNOUNCE EVACUATION & ASSEMBLY INSTRUCTIONS

CONDITION B EVACUATION:

"Attention all personnel. Attention all personnel. An evacuation of the WNP-2 Protected Area has been ordered. All emergency response personnel report to your emergency center. All other personnel exit the plant through the RCA access point on the west side of the plant and proceed rapidly out of the Protected Area through the Alternate Access Point. Then proceed by any available transportation north around the Plant to the Richland Office Complex Warehouse at Supply System Headquarters."

3. REPEAT STEPS 1 AND 2

4. CALL SECONDARY ALARM STATION (SAS)

Call ext. 2230 and direct the Duty Officer to announce, and repeat at least twice, the above message over the Maintenance and Security radio channels.

5. INITIAL ANNOUNCEMENT MADE BY: _____

DATE/TIME: _____ FROM: _____

6. REPEAT THE ALERTING TONE AND ANNOUNCEMENT

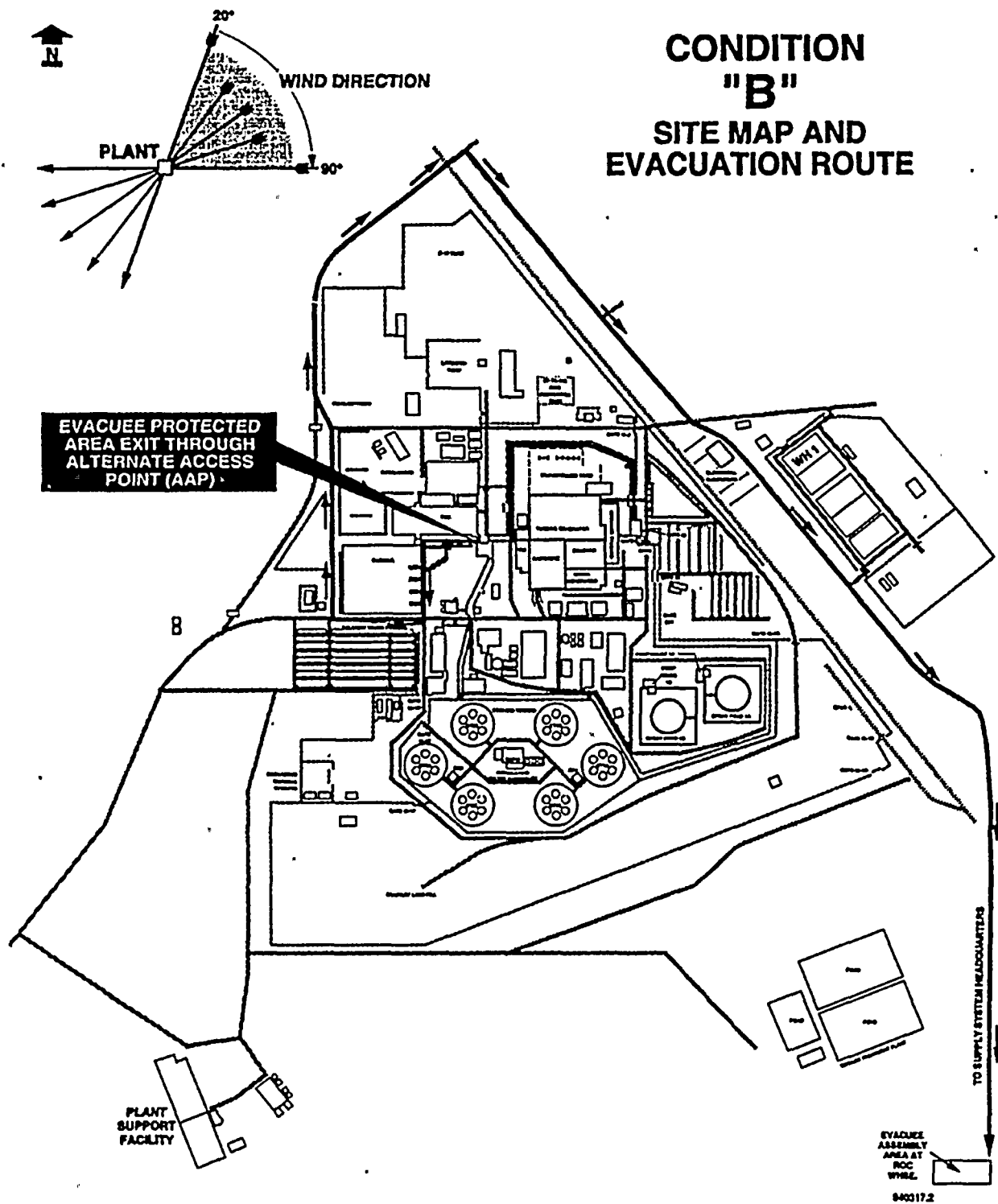
Repeat Steps 1, 2 & 3 approximately every 10 minutes until evacuation is complete.

7. RECORD FOLLOWUP ANNOUNCEMENTS

Record the times that followup announcements were made on the reverse side of this form and attach completed form to your After Action Report.

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4.2 Search and Rescue Inside the Protected Area

4.2.1 OSC Manager Responsibilities

- a. Assign the Fire Brigade (FB) or other team if the FB is unavailable to search for unaccounted for personnel.
- b. If radiological hazard is suspected, consult with the OSC HP Lead, or the Radiation Protection Manager to determine search team equipment needs, specific hazards in area(s) to be searched, acceptable dose limits, and safe routes to and from search area(s).

NOTE: The areas to be searched for unaccounted for individuals are determined from accountability reports or reports from an individual's supervisor.

- c. Brief the team members on:
 - (1) Who is assigned team leader
 - (2) Identity of missing individual(s)
 - (3) Last known location(s)
 - (4) Area(s) to be searched
 - (5) Expected conditions and hazards to be anticipated in the search area(s)
 - (6) Safe routes in and out of search area(s)
 - (7) Acceptable limits of exposure to hazards in search area(s).
 - (8) Direct the team leader establish and maintain communication with the OSC Team Tracker and keep you informed of search progress and any problems encountered.
- d. Keep the TSC Manager informed of search and rescue operations and any problems encountered.
- e. Deliver After Action Reports to an Emergency Preparedness representative.

5.0 FORMS

The form listed below is available through Forms Control:

5.1 Personnel Accountability Log, 968-25691

6.0 ATTACHMENTS

None

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 WASHINGTON PUBLIC POWER SUPPLY SYSTEM		VERIFY PRIOR TO USE
		DATE
<p align="center">WNP-2 PLANT PROCEDURES MANUAL</p>		
PROCEDURE NUMBER	APPROVED BY	DATE
*13.9.1	JHS - Revision 13	11/29/95
VOLUME NAME		
EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION		
ENVIRONMENTAL FIELD MONITORING AND SAMPLING		
TITLE		
ENVIRONMENTAL FIELD MONITORING OPERATIONS		

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1.0 PURPOSE

This procedure provides those individuals involved with Environmental Field Team (EFT) operations with instructions for responding to radiological emergencies at Supply System nuclear facilities. The Environmental Field Teams will confirm radiological releases through actual measurements in the field to determine the extent of plume travel and contamination spread. Sampling and field analysis will be conducted following the instructions contained in attachments to this procedure.

2.0 REFERENCES

- 2.1 FSAR, Chapter 13.3, Emergency Plan, Sections 2, 5
- 2.2 HPI 13.4.1, WNP-2 Environmental Thermoluminescent Dosimeter (TLD) Distribution and Collection
- 2.3 HPI 13.4.1.1, Trip Directions to TLD Stations
- 2.4 HPI 13.4.2, Airborne Samples Distribution, Collection and Shipping
- 2.5 HPI 13.4.2.1, Trip Directions to Environmental Air Sampler Stations
- 2.6 PPM 13.2.1, Emergency Exposure Levels/Protective Action Guides
- 2.7 PPM 13.9.5, Environmental Sample Collection
- 2.8 PPM 13.9.8, River Evacuation Monitoring
- 2.9 PPM 13.13.4, After Action Reporting
- 2.10 PPM 13.14.4, Emergency Equipment

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3.0 PRECAUTIONS AND LIMITATIONS

- 3.1 Environmental air sampling should be performed sufficiently downwind to minimize dose. All field team personnel should be instructed to contact MUDAC prior to entering the plume and should be made aware of expected dose rates. Air sampling should not be conducted in fields greater than 2 rem/hr.
- 3.2 When driving off-road during the dry summer months, Field Team personnel should be aware of the potential for grass fires started by the vehicle's hot exhaust.
- 3.3 Due to the potential hazard of explosion or fire, adhere to good safety practices when obtaining environmental air samples by connecting the sampler's positive battery terminal lead first, then connecting the negative lead to a ground away from the battery's negative lead cable post (a ground connection can be any metal object within the vehicle's engine compartment). When completed air sampling, disconnect the negative lead first.
- 3.4 Field Team personnel need to be aware of the potential for heat stress problems when dressed in protective clothing on a hot summer day. The Field Team Coordinator should request a Safety Representative be called out for advisory purposes if this is perceived to be a potential problem.

4.0 PROCEDURE

4.1 Field Team Coordinator Duties

NOTE: The Field Team Coordinator checklist (Attachment 6.8) is provided for guidance only and is not required to be completed.

- 4.1.1 Provide overall direction of environmental field teams. Coordinate each organization's team activities with the responsible agency for their respective area:
 - a. Exclusion Area Boundary -- Supply System
 - b. Hanford Reservation -- Supply System and DOE-RL
 - c. Outside the Hanford Reservation -- Supply System and Washington State Department of Health
- 4.1.2 Assign each field team deployed an identification number for use in communications and reporting (e.g., SS-1, SS-2, DOE-1, DOE-2, etc.).

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- 4.1.3 Interface with the Dose Projection Health Physicist (DPHP) to determine the following:
- Projected release path.
 - Areas which may require surveys, air sampling, or environmental sampling to verify plume location and deposition.
 - Emergency worker dose factor. The REM may need to be consulted for this information.
- 4.1.4 Determine current year-to-date (YTD) dose of each Supply System field team member by referencing the Total Exposure System (TES) in Passport, on any available computer connected to the LAN. During normal working hours, Radiation Exposure Records may be contacted for assistance. During off hours, the HP Access Control Area may be contacted for assistance.
- 4.1.5 Log each field team member's current year-to-date (YTD) dose, available dose and the emergency worker dose factor in the Emergency Worker Dose Worksheet Section of the Field Team Dispatch and Tracking Worksheet (Form 968-25815). Available dose is 5000 mrem minus current YTD dose.
- 4.1.6 If necessary, request a support person or additional field team member to assist with recording incoming field team data.
- 4.1.7 Direct the Field Team Dispatcher in the control and briefing of field teams.
- 4.1.8 Develop an initial plan of action to detect radiological effluent releases through the use of field teams taking into account computer generated data on current and potential effluent release exposure areas.

CAUTION: Environmental air sampling should be performed sufficiently downwind to minimize dose. All field team personnel should be instructed to contact MUDAC prior to entering the plume and should be made aware of expected dose rates. Air sampling should not be conducted in fields, projected or actual, greater than 2 rem/hr.

- 4.1.9 Position field teams per the following guidelines ensuring that field team member exposure is controlled in accordance with ALARA principles:
- locate one field team downwind in close proximity of the plant (about $\frac{1}{4}$ - $\frac{1}{2}$ mile depending on wind conditions) to verify through field readings when the release begins.
 - locate the other field teams farther downwind to detect the leading edge and possibly the approximate side boundaries of the plume.

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- 4.1.10 Direct field teams to contact you for further instructions when they have located the plume boundary and prior to entering the plume for additional readings.
- 4.1.11 Keep the DPHP informed of field monitoring results.
- 4.1.12 Reposition field teams as necessary to track the plume's leading edge, the side boundaries and, when the release terminates, the trailing edge.
- 4.1.13 Consult with the REM to determine when an environmental air sample is necessary to determine specific isotopic content of the plume. If so, direct the field team to enter the plume and obtain the air sample keeping exposures ALARA.
- 4.1.14 Periodically request dosimeter readings of field team members to assure personnel do not exceed Supply System guides. See PPM 13.2.1 for exposure guides and limits. Ensure dosimeter readings are logged on the Field Team Dispatch and Tracking Worksheet (Form 968-25815).
- 4.1.15 Periodically, or as requested, provide completed Field Team Summary Maps (Form 968-25130) to the REM.
- 4.1.16 When directed to assist with river evacuation monitoring, dispatch a field team to implement PPM 13.9.8.
- 4.1.17 Notify field teams when decisions are made to take KI, or to implement other protective measures.
- 4.1.18 Arrange for replacement of field team instrumentation or supplies when needed.
- 4.1.19 Upon shift change, brief your relief on current status of the emergency and field team activities.
- 4.1.20 Upon shift change or termination of the emergency:
- a. Prepare an individual After Action Report. Refer to PPM 13.13.4.
 - b. Collect Field Team Kit Inventory Sheets and After Action Reports from all field teams.
 - c. Deliver After Action Reports to the DPHP.

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4.2 Field Team Dispatcher Duties

- 4.2.1 Assign and dispatch field teams as directed and record data on the Field Team Dispatch and Tracking Worksheet (Form 968-25815).**
- 4.2.2 Maintain radio contact with field teams and enforce radio discipline and good practices.**
- 4.2.3 When significant changes occur during the emergency, complete a Field Team Briefing Worksheet (Attachment 6.9), conduct a radio briefing of worksheet information, and record field team acknowledgement.**
- 4.2.4 Maintain up-to-date 10 mile and 50 mile MUDAC Field Team display maps, showing field team and field lab locations, and showing field team radiological monitoring results.**
- 4.2.5 When directed, notify field teams of any Protective Action Decisions (PADs) affecting the field teams or the public:**
- 4.2.6 Periodically request dosimetry readings from field team members to ensure they are within limits and notify the Field Team Coordinator of results.**
- 4.2.7 Maintain radio communications capability until all field teams have returned to the Plant Support Facility.**
- 4.2.8 Act as Field Team Coordinator when requested.**
- 4.2.9 Upon shift change, brief your relief on the current status of the emergency and field team activities.**
- 4.2.10 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 Field Team Coordinator.**

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4.3 Environmental Field Team Member Duties

- 4.3.1 Upon notification of Alert or higher classification, or as directed, proceed to the Emergency Operations Facility, or if directed, to Supply System Headquarters, and report to the Radiological Emergency Manager, Field Team Coordinator, or Field Team Dispatcher (by telephone if necessary).

NOTE: If none of the above personnel are present, proceed with those procedure steps listed for getting field team equipment ready for use. Check back with one of the listed personnel when ready for dispatch.

- 4.3.2 Sign in on the EOF staffing board designated for listing field team members and obtain a field team identification designator number (i.e., SS-1, SS-2, etc.).

- 4.3.3 Obtain keys for a Supply System designated field team vehicle from the MUDAC Emergency Supply Cabinet, or for Headquarters Vehicles, from the Headquarters equipment locker located outside Room 201.

- 4.3.4 The first team member to arrive at the EOF should retrieve the Field Team Emergency Cabinet keys (and the key to the First Aid Room for entry to the ambulance bay) from the red key box on the MUDAC Emergency Supply Cabinet and unlock the following:

- a. Field Team Emergency Cabinets #1 through #3 (PSF Ambulance Garage).
- b. EOF Decon Supply Cabinet (PSF Room 118A - by decon shower).
- c. Radio Charger Cabinet (PSF Room 118A - by decon shower).

NOTE: Additional field team kits and the River Evacuation and Monitoring Kits are located outside Room 201 of the MPF. Keys for the cabinet are located in the red glass front key box on the wall adjacent to the Room 201 door. Enter the MPF via the southeast keycard sliding door.

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- 4.3.5 Obtain field team equipment from the designated cabinets which includes the following:

NOTE: The combination to the field team kits is 911.

- a. Field Team Document Packet of Maps, Forms and Procedures from the supply cabinet in the EOF
- b. Protective Clothing Kit
- c. Instrumentation Kit
- d. Ribbonded Stakes for marking sample locations
- e. Air Sampling Kit
- f. Field Sampling Kit
- g. Field Team Portable Radios (2) and Spare Batteries (2) located in the Radio Charging Cabinets in PSF Room 118A.

- 4.3.6 If the inventory seal on any of the kits is broken, inventory the contents of that kit per the PPM 13.14.4 inventory list (located in the Field Team Document Packet) and notify the Field Team Coordinator if anything is missing.

NOTE: The sources to be used for performing instrument source checks are located in the Radio Charging Cabinet in Room 118A. The sources should be returned to this cabinet when source checks are complete.

- 4.3.7 Perform battery and source check, as applicable, on all radiation survey instruments in the instrumentation kit and record the information on the Checklist for Equipment Test, Attachment 6.1, located in the Field Team Document Packet.
- 4.3.8 Zero the low range and high range pocket dosimeters, write your name and Social Security Number (SSN) on the TLD label, and place one of each type of dosimetry on the front of your upper torso.
- 4.3.9 When equipment check and vehicle loading is complete, establish radio contact with MUDAC and conduct radio check. See Attachment 6.2, Radio & Cellular Phone Operation Instructions, for guidance.

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NOTE: If your radio is inoperable, establish contact by phone, or by cellular phone from a Field Team vehicle.

4.3.10 Obtain initial deployment assignment from MUDAC, and when directed, don appropriate protective clothing (PCs), and proceed to assigned location, continuously monitoring radiation levels.

4.3.11 Use the emergency zone map books provided in the Field Team document packet to locate assigned position, or to locate positions for reporting Field Team survey results.

NOTE: When using the field team kit magnetic compass to locate positions, remember that it points to Magnetic North, which is approximately 20° East of True North. MUDAC will announce compass directions in True North.

4.3.12 Notify the Field Team Dispatcher upon arrival at your assigned location.

4.3.13 As directed, perform general area surveys, ground contamination surveys and portable air samples following the instructions contained in Attachments 6.3 through 6.6.

4.3.14 Maintain a chronology of significant inputs, actions, events and their resolutions on an already established log, or on the Emergency Response Log (Form 968-23895), for attachment to your After Action Report per PPM 13.13.4.

4.3.15 If directed to perform River Evacuation Monitoring refer to PPM 13.9.8.

4.3.16 If directed to retrieve environmental TLDs and/or fixed air samples, refer to Attachment 6.7.

4.3.17 When relieved at shift change, or termination of emergency event:

- a. Brief your relief on responsibilities, duties and current status of actions being performed.
- b. Report to the PSF ambulance bay area for survey, and, if necessary, decontamination.
- c. Turn in personnel dosimetry to the Health Physics Center staff and report to MUDAC for debriefing.
- d. Prepare an individual After Action Report per PPM 13.13.4.
- e. Deliver After Action Reports to the Field Team Coordinator.

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4.3.18 When assigned as relief for the on shift Environmental Field Team Members:

- a. Report to the Field Team Coordinator in MUDAC.
- b. Receive an update on present conditions, and instructions for relieving the on shift team members.
- c. Prior to beginning the assignment, report to the Health Physics Center for personnel dosimetry issuance and a complete set of protective clothing.
- d. Obtain replacement radio batteries from the radio charging cabinets in PSF Room 118A.
- e. Proceed to the field team location you are relieving, receive briefing and relieve the on shift field team.
- f. Perform a battery and source check on all applicable instrumentation. Complete the Checklist for Equipment Test, Attachment 6.1.

4.3.19 Upon return of field team equipment:

- a. Restore equipment to correct field team kit container and place in designated cabinet.
- b. Complete the Field Team Kit Replenishment Log located on the inside of the field team cabinet door noting any items used out of the kits. Refer to Attachment 6.10.
- c. Prepare an Individual After Action Report per PPM 13.13.4.
- d. Deliver all logs, data worksheets, and After Action Reports to the Field Team Coordinator.

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5.0 FORMS

The forms listed below are available through Forms Control:

- 5.1 Sample Identification Form, 968-19324
- 5.2 Emergency Response Log, 968-23895
- 5.3 Field Team Dispatch and Tracking Worksheet, 968-25815
- 5.4 Ten Mile EPZ Field Team Summary Map, 968-25130

6.0 ATTACHMENTS

- 6.1 Checklist for Equipment Test
- 6.2 Radio & Cellular Phone Operation Instructions
- 6.3 Field Radiation Surveys (General Area and Ground Contamination)
- 6.4 Portable Air Sampling Instructions
- 6.5 Sample Identification Form (968-19234) Instructions
- 6.6 Air Sampling Worksheet
- 6.7 Environmental TLD and Fixed Air Sample Retrieval Instructions
- 6.8 Field Team Coordinator Checklist
- 6.9 Field Team Briefing Worksheet
- 6.10 Field Team Kit Replenishment Log

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CHECKLIST FOR EQUIPMENT TEST

Instrumentation Kit	Serial Number	Initials/Date & Time	Source Check		Battery Check	
			Sat	Unsat	Sat	Unsat
Micro R Meter						
Beta/Gamma Dose Rate Meter						
Count Rate Meter/Pancake GM Probe						
Portable Radio (Check operability with Field Team Coordinator)	N/A		N/A	N/A		
Other (Specify)						

Attachment 6.1

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RADIO & CELLULAR PHONE OPERATION INSTRUCTIONS

1. Radio Operating Procedures

- a. Turn on the radio.
- b. Set the frequency selector to the F-1 channel.
- c. Place the speaker toggle switch to normal position (speaker open).
- d. Rotate the squelch control counterclockwise until you receive squelch.
- e. Adjust the volume to desired level.
- f. Rotate the squelch control clockwise until the noise just stops. This is the threshold setting. Do not adjust further. Excessive squelch reduces radio sensitivity. If unable to silence squelch, the battery must be replaced. Contact the Field Dispatcher for replacement batteries.

2. Radio Transmitting Instructions

NOTE: Continuous transmissions lasting longer than approximately 30 seconds will be automatically interrupted by the repeater.

- a. Hold the radio upright with the speaker-microphone grill two or three inches from your mouth.
- b. Do not interrupt another user. If you do, someone will not be heard.
- c. When preparing to transmit, press the talk switch, and wait approximately one second before talking.
- d. Talk in a slow, clear, normal voice, with brief transmissions.
- e. When finished transmitting, release the talk switch to receive.
- f. State the station you are calling first, then state your identification number (e.g., MUDAC this is SS-2, or SS-2 this is WA-3).

3. Cellular Phone Instructions

- a. The cellular phone is activated automatically when the vehicle's ignition switch is in the ON position (vehicle running or not). If the phone does not activate, check the ON/OFF pushbutton on the left side of the stand. It must be IN for operation.
- b. To place a call:
 - Remove the phone from its stand (or leave in the stand to use the remote microphone), enter the phone number you are calling and press the SND key.
 - When the call is complete, press the END key and hold the CLR key until the number you called is removed from the display.
- c. To receive a call:
 - Remove the phone from its stand, or to use the remote microphone, press the SND key to answer the call. Your phone will be disconnected when the calling party hangs up.

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FIELD RADIATION SURVEYS

1.0 General Area Surveys

- 1.1 Before entering an affected area, perform a background measurement using the Micro-R Meter and record background reading and time on page 3 of this attachment, Field Radiation Survey Worksheet.
- 1.2 As directed by MUDAC, proceed toward the plume using the Emergency Zone Map booklet from the Field Team Kit to help determine the exact location of the plume.
- 1.3 Search for the edge of the plume (defined as ten (10) times background) starting on lowest meter scale and increase scales as radiation levels increase.
- 1.4 When directed by MUDAC, traverse the plume constantly monitoring radiation levels and record locations, dose rates and other required information for the plume centerline and edges on page 3 of this attachment (indicate type of survey by G for general area). Proceed until the other edge of the plume is identified.
- 1.5 When the Micro-R Meter reads 2000 micro-R/hr (2 mrem/hr) or greater, change to the beta/gamma dose rate instrument, RO-2A.
- 1.6 If the dose rate is greater than 2 mrem/hr, use the beta/gamma dose rate instrument to tell if you are in the plume or just seeing plume shine as follows:

NOTE: All open and closed readings must be done in the same location and not from a moving vehicle. Consider ALARA practices in choosing how many readings to take.

- a. When first entering the plume, and again at centerline, take open and closed window readings at 3 feet and 6 inches above the ground.
- b. If the open and closed window readings are approximately the same, then the plume is probably overhead and has not touched down.
- c. If the open window reading is higher than the closed window reading, (by approximately 20% or greater) then you are probably in the plume.
- d. Record both sets of open and closed window readings.

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- 1.7 If the Micro-R Meter indicates a plume reading of less than 2000 micro-R/hr, you can determine if you are actually in the plume (instead of under it) by repeating Step 1.6 using the GM pancake probe as the instrument, and the cardboard from your notebook as a window.
- 1.8 Do not stop to report data while in the plume. Report the plume edge and centerline readings and their locations to the Field Team Dispatcher at the earliest possible time.
- 1.9 Leave the plume area when not taking readings, but leave the instrument turned on at all times for constant monitoring purposes.
- 1.10 After being in the plume, periodically conduct a survey of you and your vehicle using the count rate meter, and if grossly contaminated, advise the Field Team Dispatcher.

2.0 Ground Contamination Surveys

- 2.1 As directed by the Field Team Dispatcher, perform a ground contamination survey:
 - a. Select small area of level ground (3' x 3') with minimal vegetation.

NOTE: The detector probe should not be allowed to touch the ground or come in contact with potentially contaminated vegetation.
 - b. Using the Micro-R Meter and the count rate meter, take readings at ground level (1-2 inches (5 cm) above the surface) and at waist level, approximately 3 feet above the ground.
 - c. If Micro-R Meter readings are above 2000 micro-R/hr, use the dose rate meter and repeat ground level and waist level readings at the same locations.
 - d. If ground level reading is higher than waist level reading, assume the ground to be contaminated.
- 2.2 Record all four readings on page 3 of this attachment (indicate the type of survey by C for contamination).
- 2.3 Repeat the ground contamination survey in several locations.
- 2.4 Select the highest set of readings and report them to the Field Team Dispatcher.

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FIELD RADIATION SURVEY WORKSHEET (GENERAL AREA OR CONTAMINATION)

NOTE: THIS IS CRITICAL INFORMATION. PLEASE PRINT SO IT IS READABLE AND ATTACH THIS COMPLETED WORKSHEET TO YOUR AFTER ACTION REPORT.

Team Members _____ **Date** _____ **Field Team No.** _____

Initial Background Readings (count rate, micro-R) _____ Time _____

[illegible]

+ Type of Survey--"G" for General Area; "C" for Contamination

Attachment 6.3
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PORTABLE AIR SAMPLING INSTRUCTIONS

WARNING: Environmental air sampling should be performed sufficiently downwind to minimize dose. All field team personnel should be instructed to contact MUDAC prior to entering the plume and should be made aware of expected dose rates. Air sampling should not be conducted in fields, projected or actual, greater than 2 rem/hr.

When directed by MUDAC, collect an environmental air sample in accordance with the following instructions:

NOTE: Air sampler preparation (sample head assembly) and paperwork initiation should be performed outside the plume.

1. Use a portable air sampler, equipped with a two-inch sample head, to obtain particulate and radioiodine samples.
2. Continue to monitor your exposure during performance of this procedure.
3. If not already marked, mark a charcoal or silver zeolite (AgZ) cartridge with an arrow to indicate the direction of the air flow.
4. Insert the cartridge and a clean two-inch filter paper, (spongy side facing outward), into the air sample head.
5. Proceed to assigned sample location.

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WARNING: Potential hazard of explosion or fire during connection of the sampler's leads to the vehicle's battery terminals exists.

6. Connect the sampler's positive lead to the vehicle's battery first, then connect the negative lead to a ground away from the battery's negative terminal. A ground connection can be any metal object within the vehicle's engine compartment.
7. When air sampling is complete, disconnect the negative lead first, then the positive lead.
8. If using battery-operated air sampler, connect the sampler to your vehicle's battery and leave vehicle engine running while operating the air sampler to assure constant voltage.
9. Ensure the following conditions of operation are met:
 - If at all possible, do not place sampler on a known contaminated surface
 - Keep sampler away from vehicle exhaust gases
 - Do not point air sampler inlet toward any object which may restrict air flow
 - Do not stand in front of sampler inlet when running or allow loose clothing to restrict air flow
10. Turn the air sampler on. Determine initial flow rate from the rotometer on the side of the air sampler.
11. If the flow rate is less than one or greater than five CFM, the air sample will be invalid. Leave the plume and contact the Field Team Coordinator for further instructions.
12. Perform area dose rate survey for sample location.
13. Return to the vehicle's interior and record start flow rate, sample start time and sample location dose rate on the Sample Identification Form (Form 968-19324).
14. Based on air sampler flow rate, determine the sample time necessary to obtain a sample of 10 cubic feet.
15. Upon completion of sampling, note stop flow rate and sample stop time, then turn off and disconnect sampler.

Attachment 6.4
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16. Leave the area of the plume to complete your documentation following the instructions in Attachment 6.5.
17. Label the plastic bags for the filter and charcoal cartridges with the sample identification number, location, date, and time collected.
18. If using charcoal cartridge vs. Silver Zeolite, purge noble gases by reconnecting air sampler to vehicle battery and drawing clean air through filter and cartridge for a minimum of 2 minutes.
19. Disassemble sample head to allow access to the particulate filter and the cartridge.
20. Determine filter and cartridge dose rate or count rate by placing the appropriate instrument detector on the inlet side of the filter or cartridge.
21. Record sample readings on Sample Identification Form (968-19324).
22. Remove the filter (using tweezers) and the cartridge from sample head and place filter and cartridge in separate plastic bags then seal bags.
23. When requested by MUDAC, perform a field analysis of the cartridge or particulate filter by doing the following steps:
 - a. Obtain background count rate (should be less than 500 cpm) and cartridge or filter count rate (see Step 17 above) and record on Attachment 6.6.
 - b. Calculate the $\mu\text{Ci/cc}$ of Iodine Activity or Particulate Activity using the equations in Step 1 and Step 2 of Attachment 6.6.
24. Record field iodine and particulate results in Remarks Section of Sample Identification Form and report to Field Team Coordinator.
25. Survey team members for contamination. If contaminated, advise the Field Team Dispatcher.
26. Transport the samples, with Sample Identification Forms, as directed by the Field Team Coordinator. Ensure that particulate filters and the corresponding cartridges are transported together and that Sample Identification Forms accompany the samples.

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SAMPLE IDENTIFICATION FORM (968-19234) INSTRUCTIONS

1. SAMPLE IDENTIFICATION FORM

List one sample per form. For air samples, use one sample form and one sample identification number for both the cartridge and particulate filter. Attach one copy of the form to the cartridge and one to the particulate filter.

2. SAMPLE IDENTIFICATION NUMBER DESIGNATION

SAMPLE ID NUMBERS will be in a two segment alpha-numeric code using the following format:

FIELD TEAM

AA0

SEQUENCE

000

FIELD TEAM CODES

Use a two-letter and single number designator, (e.g., SS1 for Supply System Field Team 1).

SEQUENCE

Use sequential numbers for each team throughout an event, (e.g., 003 for the third sample taken by a given team).

3. SAMPLE TYPE

Describe the type of sample being collected-air, soil, vegetation, water, etc.

4. FIELD TEAM SAMPLE LOCATION/DESIGNATION

Use sample station numbers where they exist, such as continuous environmental air sampling stations (e.g., Sample Station 3). Where no sample station number exists, as in emergency field samples, use the eight-digit map grid designator to the nearest one-tenth of a mile for location. Grid designator maps for the Plume and Ingestion zones are included with Field Team Equipment. To determine location grid designators, follow "Use Instructions" located on the first page of each map booklet.

Attachment 6.5

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AIR SAMPLING WORKSHEET

Sample No. _____

Analysis Time _____

Analyst _____

1. Cartridge Filter: AgZ Filter ☐

Charcoal Filter ☐

(Sample CPM _____) - (Background CPM _____) = Net CPM _____

$$\frac{\text{Net CPM}}{(1.89 \times 10^8) \times (\text{sample volume ft}^3)} = \text{_____ } \mu\text{Ci/cc I Activity}$$

NOTE 1: $1.89 \times 10^8 = 0.003 \text{ (eff)} \times 2.83 \times 10^4 \text{ cc/ft}^3 \times 2.22 \times 10^6 \text{ dpm}/\mu\text{Ci}$

NOTE 2: If using charcoal cartridge, ensure cartridge is purged of noble gases.

2. Particulate Filter

(Sample CPM _____) - (Background CPM _____) = Net CPM _____

$$\frac{\text{Net CPM}}{5.65 \times 10^9 \times (\text{sample volume ft}^3)} = \text{_____ } \mu\text{Ci/cc Particulate Activity}$$

NOTE: $5.65 \times 10^9 = 0.09 \text{ (eff)} \times 2.83 \times 10^4 \text{ cc/ft}^3 \times 2.22 \times 10^6 \text{ dpm}/\mu\text{Ci}$

Attachment 6.6

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ENVIRONMENTAL TLD AND FIXED AIR SAMPLE RETRIEVAL INSTRUCTIONS

1.0 ENVIRONMENTAL TLD RETRIEVAL

Radiological Emergency Manager/Field Team Coordinator Duties

- 1.1 Consult with the Washington DOH representative at the Emergency Operations Facility (EOF) and determine the need for collection and replacement of environmental TLDs during the emergency.

NOTE: If possible, involve the Radiological Environmental Monitoring Program (REMP) Supervisor in any nonscheduled collection or deployment of environmental TLDs.

- 1.2 When collection is determined advisable, dispatch an experienced REMP staff member as part of an Environmental Field Team, to replace the ANNUAL TLD badges at selected locations as described in HPI 13.4.1 and HPI 13.4.1.1.

NOTE: Copies of HPI 13.4.1 and HPI 13.4.1.1 are in the document packet of the Environmental Field Team kit located in the MUDAC emergency supply cabinet.

REMP Staff Member Duties

- 1.3 Obtain from Health Physics Center personnel the appropriate number of packaged TLDs for distribution.
- 1.4 Ensure that the required number of TLDs are provided for each exchange group as directed by the Radiological Emergency Manager (REM).
- 1.5 Contact the Field Team Coordinator regarding radiological conditions in the field, and follow his/her directions on individual radiation protection measures.
- 1.6 Proceed to the TLD stations as directed by the Field Team Coordinator.
- 1.7 Exchange only the ANNUAL TLDs.
- 1.8 When the TLDs have been exchanged, return to the Health Physics Center and turn them in to the Health Physics Center Staff for processing.

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2.0 FIXED AIR SAMPLE RETRIEVAL

Radiological Emergency Manager/Field Team Coordinator Duties

- 2.1 Consult with the Washington DOH representative at the EOF and determine the need for collection of fixed air samples during the emergency.

NOTE: If possible, involve the REMP Supervisor in any nonscheduled collection of fixed air samples.

- 2.2 If collection is determined advisable, dispatch experienced REMP personnel as part of an Environmental Field Team to collect air samples at selected locations in accordance with HPI 13.4.2 and HPI 13.4.2.1.

NOTE: Copies of HPIs 13.4.2 and 13.4.2.1 are in the document packet of the Environmental Field Team kit located in the MUDAC emergency supply cabinet.

REMP Staff Member Duties

- 2.3 Contact the Field Team Coordinator regarding radiological conditions in the field and follow his/her directions on radiation protection measures to be taken.

- 2.4 Proceed to the fixed air sample stations as directed by the Field Team Coordinator.

- 2.5 Collect the air samples.

NOTE: If the emergency involved a radioactive release, calculations of the volume of air sampled may need to be restricted to the time during which the plume or puff was over the station. Request guidance from the Field Team Coordinator if the fixed air sample was in the path of a release during the sampling period.

- 2.6 When the air samples have been collected, return to the Health Physics Center and turn them in to the Health Physics Center Staff for processing.

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FIELD TEAM COORDINATOR CHECKLIST

DATE _____

	<u>Actions</u>	<u>Time Completed</u>	<u>Initials</u>
1.	Sign in on board, obtain supply drawer from EOF supply cabinet, and notify the REM of your availability.	_____	_____
2.	Brief the field team coordinators from other agencies supplying field teams and reach a consensus about management of their field teams.	_____	_____
3.	Determine current year-to-date exposure of Supply System field team members prior to deployment.	_____	_____
4.	Assign field team members and a designate team identification number (one HP and one non HP per team, if possible).	_____	_____
5.	Ensure field teams have transportation and other equipment.	_____	_____
6.	Direct the Field Team Dispatcher(s) to brief the teams approximately each 30 minutes on current radiological projections or other appropriate information about emergency conditions.	-ongoing-	
7.	If necessary, assign an individual to act as field team recorder.	_____	_____
8.	Interface with the Dose Projection HP to determine projected plume path and emergency worker dose factor.	-ongoing-	
9.	Develop a strategy for assigning Field Teams initially, verifying plume path, and dealing with EOF inaccessibility.	-ongoing-	
10.	Direct field teams to perform field surveys per field team survey instructions contained in this procedure.	-ongoing-	
11.	Provide completed Field Team data summary maps to the Dose Projectionist Health Physicist (DPHP) as new information is developed. During rapidly changing conditions, try to do this at least every 30 minutes.	-ongoing-	
12.	If requested to assist with river evacuation monitoring, implement PPM 13.9.8 (kits are in MPF).	_____	_____
13.	Direct the dispatcher to periodically ask for field team dosimetry readings. Keep exposure ALARA.	-ongoing-	

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	<u>Actions</u>	<u>Time Completed</u>	<u>Initials</u>
14.	Arrange for field team replacement supplies, as necessary.	-ongoing-	
15.	Provide completed Field Team Summary Maps to the REM.	-ongoing-	
16.	Notify field teams when decision is made to recommend KI.	_____	_____
17.	Upon shift change or change to State control, brief replacements.	_____	_____
18.	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, logs, and all field team worksheets to the REM.	_____	_____

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FIELD TEAM BRIEFING WORKSHEET

Date _____
Time _____

Plant Status: _____

Emergency Classification: _____

Environmental Release Time: _____ Duration: _____

Projected Dose/Location: _____

Weather: Wind Direction From: _____ To: _____

Wind Speed: _____ Stability: _____

Forecast: _____

PAD for Public: _____

Other: _____

Roll Call/Acknowledgment:

TEAM NO.	ACKNOWLEDGED AT: (Time)	COMMENTS

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FIELD TEAM KIT REPLENISHMENT LOG

Date _____ Team Members _____

FIELD TEAM MEMBERS: List below the items used from each kit during the drill/event so that the kits can be restocked appropriately.

INSTRUMENTATION KIT:

AIR SAMPLING KIT:

PROTECTIVE CLOTHING KIT:

FIELD SAMPLING KIT:

MISCELLANEOUS (FORMS, MAPS, PROCEDURES, ETC.)

Attachment 6.10

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- 4.1.3 For any potential security 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
- 4.1.4 If neither MUDAC nor the Technical Support Center (TSC) have been activated; and:
- a. An effluent release above Technical Specifications has, or is occurring; or
 - b. An abnormal release of radioactive effluents is indicated;
- direct a qualified individual to initiate offsite dose calculations per PPM 13.8.1 and determine if Protective Action Recommendations (PARs) for the public in accordance with PPM 13.2.2, or classifications in accordance with PPM 13.1.1, are required.
- 4.1.5 If the Technical Support Center (TSC) is activated, transfer responsibilities for peripheral duties not directly related to reactor systems manipulation to the TSC.
- 4.1.6 Keep the Operations Manager in the TSC informed of plant conditions and actions which may impact in plant or offsite activities.
- 4.1.7 Request the Operations Manager call in additional Control Room support personnel as needed.
- 4.1.8 If notified of an emergency situation that requires Fire Brigade response, perform the following twice:
- a. Activate the alerting tone.
 - b. Announce the type of emergency.
 - c. Give the emergency's location.
 - d. Request the Fire Brigade respond to the emergency.

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- e. Establish communications with the Fire Brigade Leader at the scene of the emergency to obtain situational reports, confer on action plans, and assess manpower and equipment needs for mitigating the emergency.
- f. Ensure the Control Room maintains accountability for emergency personnel performing Fire Brigade or Emergency Operating Procedure (EOP) activities until the OSC is activated.

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

4.1.9 When activated, the OSC becomes responsible for accountability of plant emergency workers and the Control Room needs to inform the OSC of:

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

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

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

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

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

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

4.1.14 Maintain a log of events and actions.

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SHIFT MANAGER CHECKLIST

<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
4.1 <u>Shift Manager Actions</u>		
1. Diagnose plant conditions and direct necessary actions to alleviate abnormal conditions.	_____	_____
2. Implement actions of Section 4.7 until relieved by the responding ED per Section 4.6.	_____	_____
3. 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.	_____	_____
4. If MUDAC nor the TSC have activated and an abnormal release of radioactive effluents is indicated, direct a qualified individual to initiate offsite dose calculations and determine if PARs per PPM 13.2.2 or classification per PPM 13.1.1 are required.	_____	_____
5. If TSC or EOF is activated, transfer responsibilities not directly related to reactor manipulation to the TSC.	_____	_____
6. Keep Operations Manager in TSC informed of plant conditions which may impact in plant or offsite activities.	_____	_____
7. Request Operations Manager call in additional CR support personnel as needed.	_____	_____
8. If notified of emergency situation that requires FB response, perform the following twice: <ul style="list-style-type: none"> a. Activate the alerting tone. b. Announce the type of emergency. c. Give the emergency's location. d. Request the FB respond to the emergency. e. Establish communications with FB Leader at scene to obtain situational reports, confer on action plans, and assess manpower and equipment needs. f. Ensure Control Room maintains accountability for personnel performing FB or EOP activities until the OSC is activated. 	_____	_____

Attachment 6.1

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<u>Response Actions</u>	<u>Time Completed</u>	<u>Initials</u>
9. When activated, inform OSC of known or suspected Plant hazards, and names of dispatched FB or EOP teams, assignment, location, time dispatched and expected time to return.	_____	_____
10. If task requires immediate response, designate it as "urgent" and communicate to TSC Operations Manager or TSC Manager.	_____	_____
11. If more than one "urgent" task is identified, select a priority for each and inform the TSC Operations Manager.	_____	_____
12. If notified of need for offsite medical assistance, implement PPM 1.9.14.	_____	_____
13. Refer any incoming media calls to the JIC.	_____	_____
14. Maintain log of events and actions.	_____	_____
15. For termination of emergency, collect After Action Reports (AAR) from staff, prepare an individual AAR per PPM 13.13.4, and deliver AARs to Operations Manager.	_____	_____

4.6 Transfer Of Emergency Director Duties

1. If transferring the ED duties:
 - a. When contacted by an oncoming ED, give a time when conditions would permit the turnover process. _____
 - b. At the time when conditions permit, contact oncoming ED and conduct a turnover using the Classification Notification Form or the Emergency Director Turnover Sheet as a guide. _____
 - c. Once the oncoming ED fully understands current conditions and proposed actions, transfer ED duties. _____
 - d. Announce the transfer to the facility staff. _____
 - e. Log the transfer in the facility log. _____

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1.0 PURPOSE

To describe the responsibilities of the Operations Support Center Manager and staff for the operation of the Operations Support Center (OSC). The General Service Building Production Scheduling area will normally serve as the center. Other General Service Building areas can be used for OSC Operations as needed.

2.0 REFERENCES

- 2.1 FSAR, Chapter 13.3, Emergency Plan, Sections 2, 5 and 6
- 2.2 PPM 13.5.1, Localized and Protected Area Evacuations
- 2.3 PPM 13.5.5, Personnel Accountability, Search and Rescue
- 2.4 PPM 13.10.12, Reentry/Recovery Team Duties
- 2.5 PPM 13.11.18, Information Coordinator Duties
- 2.6 PPM 13.13.4, After Action Reporting

3.0 PROCEDURE

Responsibilities of the Operations Support Center Manager

- 3.1 Upon notification of an Alert, Site Area or General Emergency, or if so directed, present your badge keycard to the OSC personnel accountability keycard reader, and proceed to the Operations Support Center (OSC) to assume the Manager's duties.
- 3.2 Obtain appropriate briefing from the Shift Manager (SM) or Maintenance Manager on:
 - Known or suspected Plant hazards
 - Names of dispatched FB or EOP team members
 - Assignment
 - Location
 - Time dispatched and expected time of return

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3.3 Assign a communicator to man the direct ringdown phone to the Maintenance Manager in the TSC. It is desirable for this communicator to have either SRO or Management Certification.

3.4 Establish operational readiness of the OSC.

- a. Declare the OSC activated when these positions identified as required in the Emergency Plan are on site:

OSC Manager
Electricians (2)
Mechanics (2)
Health Physics Technicians (3 on shift, 6 responders)
Fire Brigade (on shift)
Shift Support Supervisor (on shift)
Equipment Operators (on shift)
Chemistry Technicians (1 on shift)
I&C Technicians (on shift)

OR

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

Main Responsibilities

- Dispatch in plant teams as directed by the TSC
- Ensure accountability of plant personnel
- Establish entry controls as needed

NOTE: The OSC Manager may use judgement in determining when qualified personnel will perform a task to fulfill OSC responsibilities even though the personnel may not be identified as normally assigned to the task; e.g., an Equipment Operator could perform a task normally done by an Electrician.

NOTE: Although option "2" above allows activation of the Center without all the required positions staffed, recognize that failure to staff the required positions within one hour of classification is a violation of the Emergency Plan response requirements.

3.5 Assume control for accountability and direction of any repair teams performing tasks in the Plant Protected Area.

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NOTE: Designated onshift Fire Brigade (FB) Equipment Operator members may remain under direction of the Control Room when agreed to by you and the Shift Manager.

- 3.6 Obtain direction from the Maintenance Manager regarding implementation of tasks by OSC personnel.
- 3.7 Ensure that each team is prepared to perform assigned tasks using Repair Team Briefing/Debriefing Form (Form 968-25560).
 - Task assignment information from the TSC will be received via fax or over the telephone.
 - Assign the appropriate discipline Craft Lead to prepare a Team Briefing form, brief the team, and track progress of the team. This person should also debrief the team upon return, and complete the debriefing form. Refer to Attachment 5.3
 - Review and sign off on completed team briefing and debriefing forms and give to Team Tracker to fax to the Maintenance Manager.
- 3.8 Evaluate tasks and provide direction to OSC staff on implementing work procedures.
- 3.9 When you determine tasks require deviation from established procedures or work instructions, inform the Maintenance Manager, obtain necessary change approvals and provide guidance on change decisions.
- 3.10 When advised by the Maintenance Manager to enter radiological areas for the manipulation or modification of equipment, confer with the HP Lead and initiate the appropriate section of PPM 13.10.12.
- 3.11 Direct implementation of personnel accountability operations per PPM 13.5.5 when:
 - Protected Area evacuation is ordered
 - Directed by the ED
- 3.12 For personnel unaccounted for, initiate search and rescue per PPM 13.5.5 when necessary.
- 3.13 Direct the OSC Information Coordinator transmit information on OSC activities that personnel in other centers may need to know.

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1.0 PURPOSE

This procedure describes the Technical Support Center (TSC) Maintenance Manager's responsibility for assigning tasks to be performed by Operations Support Center (OSC) teams, determining the priority to be assigned to each task, and acting as the focal point of the work control process between the TSC and the OSC.

2.0 REFERENCES

2.1 FSAR, Chapter 13.3, Emergency Plan, Sections 2, 5, 6

2.2 PPM 13.10.9, Operations Support Center Manager and Staff Duties

2.3 PPM 13.10.12, Repair Team Duties

2.4 PPM 13.13.4, After Action Reporting

3.0 PROCEDURE

3.1 Maintenance Manager Responsibilities

3.1.1 Upon arrival at the TSC, obtain a briefing from the TSC Manager on plant status and specifics regarding the following:

- Location and task assignments for the Fire Brigade (FB)
- Known or anticipated plant hazardous areas

3.1.2 Confer with the Radiation Protection Manager (RPM) to determine current plant radiological conditions which may impact repair team activities.

3.1.3 Ensure that the TSC/OSC Communicator is performing duties described in Attachment 4.1.

3.1.4 Coordinate the development of repair or damage control plans with the TSC Manager and TSC staff.

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 WASHINGTON PUBLIC POWER SUPPLY SYSTEM		VERIFY PRIOR TO USE DATE
WNP-2 PLANT PROCEDURES MANUAL		
PROCEDURE NUMBER *13.11.2	APPROVED BY JHS - Revision 8	DATE 11/29/95
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
SECTION EMERGENCY OPERATIONS FACILITY		
TITLE ASSISTANT EOF MANAGER DUTIES		

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1.0 PURPOSE

This procedure describes the emergency responsibilities and duties of the Assistant EOF Manager in assisting the EOF Manager in the overall management of Supply System resources, fulfilling the Emergency Director responsibilities in the EOF and in preparing the recovery plan and procedures.

2.0 REFERENCES

- 2.1 FSAR, Chapter 13.3, Emergency Plan, Section 2
- 2.2 PPM 13.11.1, EOF Manager Duties
- 2.3 PPM 13.13.2, Emergency Event Termination and Recovery Operations
- 2.4 PPM 13.13.4, After Action Reporting

3.0 PROCEDURE

Assistant EOF Manager Duties

- 3.1 Upon notification of an Alert, Site Area or General Emergency, or if so directed, proceed to the EOF, sign in, and notify the EOF Manager of your availability.
- 3.2 Assume EOF Manager duties any time the EOF Manager is not available at the EOF. Refer to PPM 13.11.1.
- 3.3 As necessary, maintain an open items log, Attachment 4.1, and follow up on all open items assigned by the EOF Manager, or items you identify as obligations of the EOF.
- 3.4 As directed, assist with EOF staff briefings and preparation of briefing for the arriving NRC Site Response Team in accordance with Attachments 4.2 and 4.3.
- 3.5 Maintain file of pertinent documentation received at the EOF.
- 3.6 Refer any calls from the media to the Joint Information Center.
- 3.7 When directed by the EOF Manager, assist in the development of the recovery plan and procedures. Refer to PPM 13.13.2.
- 3.8 Upon shift change, turn over open items log and fully brief your relief as to events which have transpired, and the status of EOF actions being taken.

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- 3.9 Upon shift change or termination of the emergency, prepare an individual After Action Report. Refer to PPM 13.13.4.
- 3.10 Upon termination of an Alert or higher classification:
- Serve as the chairperson and convene a Final After Action Report Committee to compile an emergency event report in accordance with PPM 13.13.4.
 - Submit the compiled Final After Action Report for EOF Manager reviews and approval.
- 3.11 Provide other assistance as requested by the EOF Manager in support of EOF obligations, such as assisting in assessment of emergency classification changes and declarations.

4.0 ATTACHMENTS

- 4.1 Open Items Log
- 4.2 EOF Briefing Guidelines
- 4.3 NRC Response Team Briefing Guidelines

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OPEN ITEMS LOG

Initials _____

[illegible]

Attachment 4.1

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EMERGENCY OPERATIONS FACILITY (EOF) 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 conditions.

1. EOF Manager update items:

- a. Current EAL declared and the basis.
- b. Onsite protective measures in effect (or planned).
- c. Overall accident mitigation objectives and their priority.
- d. Summarize any significant items from the TSC Manager.
- e. Summarize any recent significant discussions with the County/State emergency directors.
- f. Summarize any recent significant discussions/direction from the NRC.
- g. Problem areas needing resolution.
- h. NRC counterpart status report (if present).

Notes: _____

2. Radiological Emergency Manager (REM) update items:

- a. Current release rate, recent trends, prognosis.
- b. Offsite dose projection results and most recent followup messages to offsite authorities.
- c. Supply System (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. Current staffing of MUDAC Protective Action Decision Group and who is providing MUDAC direction and control.
- i. Problem areas needing resolution.
- j. NRC counterpart status report (if present).

Notes: _____

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3. Engineering Manager update items:

- a. Reactor condition, core cooling systems operations status.
- b. Containment status, current trends, prognosis.
- c. Review of accident mitigation objectives, priorities and strategies.
- d. Status of engineering evaluations in progress.
- e. Engineering support being provided EOF/TSC by offsite agencies.
- f. Problem areas needing resolution.
- g. NRC counterpart status report (if present).

Notes: _____

4. Site Support Manager update items:

- a. Status of administrative and logistics support being provided (admin. supplies, copy machines, facsimiles, etc.).
- b. Status of coordinating offsite agency personnel/equipment response.
- c. Status of personnel accountability (if Protected or Exclusion Area evacuation ordered).
- d. Status of relief shift or meal scheduling (if applicable).
- e. Problem areas needing resolution.
- f. NRC counterpart status report (if present.)

Notes: _____

5. Security Manager update items:

- a. Security activities in support of emergency operations.
- b. Review security requirements for EOF access, access roadblocks, plant badge issuance.
- c. Status of offsite agency response and civil authority roadblocks or river evacuation activities (if applicable).
- d. Summarize any significant discussions/direction from local law enforcement authorities.
- e. Problem areas needing resolution.
- f. NRC counterpart status report (if present).

Notes: _____

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6. EOF Public Information Officer (PIO) update items:
 - a. Status of JIC operations.
 - b. Summarize most recent news releases or news conferences.
 - c. Status of media response to event.
 - d. Status of media/public rumor control teams.
 - e. Problem areas needing resolution.
7. EOF briefing updates of interest from other organizations or offsite agencies.
 - a. Agency or Organization: _____
 Notes: _____

 - b. Agency or Organization: _____
 Notes: _____

 - c. Agency or Organization: _____
 Notes: _____

 - d. Agency or Organization: _____
 Notes: _____

8. Direct that key EOF personnel update their subordinates with information obtained from update briefings.
9. Select the time of the next EOF update briefing and announce it to EOF staff.
10. Conduct period update briefing of the Managing Director:
 - a. Status of onsite emergency activities.
 - b. Onsite protective measures in effect (or planned).
 - c. Evolutions in progress or planned that impact Protective Action Recommendations to offsite agencies.
 - d. Onsite manpower status.
 - e. Summarize recent discussions or direction from State or NRC.
 - f. Problem areas needing resolution.

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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: _____
- 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. _____
- ____ e. Emergency Center Status: _____
- TSC: _____
- OSC: _____
- EOF: _____

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 property:

13. Security information:

14. Other information:

15. Additional WNP-2 information sources:

<u>Information</u>	<u>WNP-2 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

Attachment 4.3

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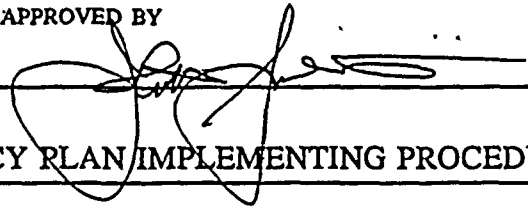
 WASHINGTON PUBLIC POWER SUPPLY SYSTEM		VERIFY PRIOR TO USE DATE
WNP-2 PLANT PROCEDURES MANUAL		
PROCEDURE NUMBER 13.11.18	APPROVED BY 	DATE 11/29/95
VOLUME NAME EMERGENCY PLAN IMPLEMENTING PROCEDURES		
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1.0 PURPOSE

This procedure defines the duties of the Information Network Coordinators and operation of the Information Network System.

2.0 REFERENCES

2.1 FSAR, Chapter 13.3, Emergency Plan, Section 6

2.2 PPM 13.13.4, After Action Reporting

3.0 PROCEDURE

3.1 General Information Coordinator Responsibilities

- 3.1.1 Upon notification of an Alert, Site Area Emergency or General Emergency, report to your designated emergency center.
- 3.1.2 TSC and OSC Information Coordinators present keycards to the cardreader for accountability.
- 3.1.3 Enter your name and badge slot number on the Accountability Log to establish manual Personnel Accountability.
- 3.1.4 Sign in on the center staffing board in the space next to your emergency position.
- 3.1.5 If you leave the center temporarily, inform the Center Manager of your destination and approximate time of return. Note your destination on the Personnel Accountability Log.
- 3.1.6 Activate the Information Network for your center by using either the Jackset and attached headset or Cordless Headset unit with base station.
 - a. If using attached jackset:
 - Plug the headset into the Jackset adapter attached to the Information Coordinator phone.
 - Attach the headset control unit to your belt.
 - Push the rocker switch on the Jackset so the red bar is showing.

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NOTE: If you are using the phone handset rather than the headset push the rocker switch on the Jackset so the red bar does not show.

- b. If using the cordless headset with base station, set up the base station as follows:

NOTE: The following applies if the base station is not set up.

- 1) Attach the transmit and receive antennas to the base station (the antennas are labeled transmit and receive).
- 2) Disconnect the Information Coordinator phone line from the wall jack and replace with the phone cord that attaches to the base station.
- 3) Connect the AC adapter to the base station and plug in to an outlet.
- 4) Turn on the base station.
 - Attach the fanny pack to your waist.
 - Connect the headset to the fanny pack and position the fanny pack power switch to the on position.
 - Place the transmitter on the fanny pack in the PTT (push to talk) position.
 - Push the red push to talk button on the fanny pack to transmit.

- c. When ready to announce your presence on line to the other emergency centers, push the PTT button to broadcast. Release it when done.

NOTE: The Technical Support Center (TSC) Information Coordinator is the Lead Coordinator for the system. Coordinators are also located in the:

- Control Room
- Operations Support Center (OSC)
- Emergency Operations Facility (EOF)

If needed, capabilities to access the Information Network are located in the Joint Information Center (JIC).

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- d. Notify the TSC Information Coordinator of your intention to be off the air for short absences, and check in upon your return.
- e. Record significant incoming information on the information board in your center provided for that purpose.
- f. Announce significant incoming information to your center manager and staff such as:
 - Time other emergency centers were activated.
 - Significant information announced from other emergency centers.
 - Significant items appearing on your center data displays. If assigned responsibility, record information on center status boards.
- g. Announce significant information to other centers, such as:
 - Time your emergency center was activated.
 - Items announced to your center staff.
 - Items ordered transmitted by the center manager.
- h. Use three part communications for specific center communications and for specific communications within your center.
- i. Refer any calls from the media to the Joint Information Center.
- j. Upon shift change, brief your relief on responsibilities, duties, and status of work being performed.
- k. Upon shift change or termination of the emergency:
 - 1. Prepare an individual After Action Report. Refer to PPM 13.13.4.
 - 2. Deliver After Action Reports and logs to your center manager.

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3.2 Control Room Information Coordinator Responsibilities

3.2.1 If the TSC Information Coordinator is not on line yet, transmit significant information from the Control Room such as:

- Emergency Classification changes.
- Protective Action Decisions made for Supply System emergency workers, e.g., Protected or Exclusion Area evacuations, KI for emergency workers, etc.
- Plant status information with emphasis on inoperable systems. Refer to WNP-2 Plant Status form (968-25918) information to broadcast. Information should be provided block by block.

NOTE: When activated, allow the EOF Information Coordinator to report Radiological Status and Met Data.

- Time checks according to the Control Room digital time display.

3.3 TSC Information Coordinator Responsibilities

3.3.1 Transmit significant information from the TSC such as:

- Plant status information with emphasis on inoperable systems. Refer to WNP-2 Plant Status form for examples of information to broadcast.
- Significant equipment out of service (OOS) or returned to service that is not listed on the WNP-2 Plant Status form or the Plant Status board.

NOTE: When activated, allow the EOF Information Coordinator to report Radiological Status and Met Data.

- Significant system repair results.
- Protective Action Decisions for Supply System emergency workers, e.g., Protected Area evacuations, KI for emergency workers.

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3.4 OSC Information Coordinator Responsibilities

3.4.1 Transmit significant information from the OSC such as:

- Significant Repair Team activities and findings.
- Inquiries to establish personnel accountability.

3.5 EOF Information Coordinator Responsibilities

3.5.1 Transmit significant information from the EOF such as:

- Significant on-site and off-site coordination activities with outside agencies.
- Field team deployment and significant readings above background.
- Significant technical analyses results reported by the Engineering staff.
- Dose projection results

4.0 FORMS

The following forms are available through Forms Control:

4.1 Emergency Response Log (968-23895)

4.2 WNP-2 Plant Status (968-25918)

5.0 ATTACHMENTS

None

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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.

2.0 DISCUSSION

Items or functional tests that are REQUIRED meet the intent of the WNP-2 Emergency Plan's requirements. Changes will constitute a revision to the procedure in terms of quantities, types of items, or functional tests and, as such, require Plant Operations Committee (POC) review.

Items or functional tests that are DESIRED are in place to assist emergency functions. The Manager, Emergency Preparedness 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 and/or quantities of items shall not be less conservative than REQUIRED.

A Level 1 library is maintained by Administration and /Records Management 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 Problem Evaluation Request (PER) 293-1343 △ {3.1}
- 3.2 WNP-2 Final Safety Analysis Report (FSAR), Section 13.3, Emergency Plan, Appendix 3, Emergency Kits △ {3.2}
- 3.3 WNP-2 Final Safety Analysis Report (FSAR), Section 13.3, Emergency Plan
- 3.4 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans And Preparedness In Support Of Nuclear Power Plants, Section H (10)
- 3.5 PPM 1.2.3, Use of Controlled Plant Procedures
- 3.6 PPM 13.14.9, Emergency Program Maintenance

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4.0 PROCEDURE

4.1 Supervisor, Health Physics Operations Responsibilities

4.1.1 Ensure cabinets or vehicles containing emergency fire, first aid or radiological protection equipment are checked at the locations, and in accordance with instructions outlined in Attachments 6.1-1, 6.1-2, 6.1-3, 6.1-4 and 6.1-5.

4.1.2 Ensure the following are checked in accordance with the instructions outlined in Attachment 6.2, EOF/Headquarters Emergency Equipment:

Field Monitoring Kits:

Location:

- Plant Support Facility and Headquarters

Decon Storage Trailer:

Location:

- ROC Warehouse

River Evacuation Kits:

Location:

- Headquarters

Equipment for PASS:

Location:

- Ambulance Bay
- Counting Room
- Chemistry Lab

4.1.3 Ensure that the HVAC is checked in accordance with instructions outlined in Attachment 6.8, Ventilation Radiation Monitoring.

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

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4.2 Shift Manager Responsibilities

- 4.2.1 Ensure that the following alarm systems are demonstrated in accordance with the instructions outlined in Attachment 6.1-6, Plant Emergency Alerting Signals:

Plant Exclusive Use Signals:

Location: Control Room

- Alerting Tone

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

4.3 Operations Manager Responsibilities

- 4.3.1 Ensure the Control Room is checked in accordance with the instructions outlined in Attachment 6.7, 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 in accordance with the instructions outlined in Attachment 6.7, 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 in accordance with the instructions outlined in Attachment 6.5, Communications System Tests.
- 4.5.2 Completed task sheets are to be forwarded to the Preventative Maintenance Program Group.

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4.6 Supervisor, Facilities Maintenance Responsibilities

- 4.6.1 Ensure that the HVAC and diesel generators are tested in accordance with instructions outlined in Attachment 6.9, Facilities Systems Tests.
- 4.6.2 Completed task sheets are to be forwarded to the Preventative Maintenance Program Group.

4.7 Manager, Emergency Preparedness Responsibilities

- 4.7.1 Ensure the Technical Support Center, Operations Support Center, the Joint Information Center, and the Emergency Operations Facility is checked in accordance with the instructions outlined in Attachment 6.7, Emergency Center Equipment and Supplies.
- 4.7.2 Completed task sheets are to be forwarded to the Preventative Maintenance Program Group.
- 4.7.3 Ensure that the Emergency Operations Facility Medical Equipment and supplies are checked in accordance with Attachment 6.6, EOF Medical Equipment and Supplies.
- 4.7.4 Ensure the following cabinets are checked in accordance with the instructions outlined in Attachment 6.3, 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 in accordance with the instructions outlined in Attachment 6.4, Emergency Planner Communications System Tests.
 - 4.7.6 Ensure the dedicated telephone lines are checked in accordance with the instructions outlined in Attachment 6.4, Emergency Planner Communications System Tests.

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- 4.7.7 Monitor compliance with this procedure's requirements, take action to insure 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.

5.0 FORMS

- 5.1 Classification Notification Forms, 968-24075
- 5.2 Event Notification Worksheet, NRC Form 361, 968-25665
- 5.3 Repair Team Briefing/Debriefing Form, 968-25560
- 5.4 Emergency Director Turnover Sheet, 968-25810
- 5.5 10 Mile EPZ Dose Projection and Data Map Form, 968-25831

6.0 ATTACHMENTS

- 6.1 WNP-2 Emergency Equipment
- 6.2 EOF/Headquarters Emergency Equipment
- 6.3 Hospital Radiological Emergency Kits
- 6.4 Emergency Planner Communications System Tests
- 6.5 Communications System Tests
- 6.6 EOF Medical Equipment and Supplies
- 6.7 Emergency Center Equipment and Supplies
- 6.8 Ventilation Radiation Monitoring
- 6.9 Facilities Systems Tests

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WNP-2 EMERGENCY EQUIPMENT

- 6.1-1 Radiological/Fire Emergency Cabinet And Van △ {3.2}
- 6.1-2 Decontamination Kits △ {3.2}
- 6.1-3 First Aid Kit, Type A △ {3.2}
- 6.1-4 First Aid Kit, Type B △ {3.2}
- 6.1-5 Emergency Protective Equipment Kit (TSC) △ {3.2}
- 6.1-6 Plant Emergency Alerting Signals

Attachment 6.1

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ITEMS IN/NEAR
RADIOLOGICAL/FIRE EMERGENCY CABINET AND VAN
WNP-2 RADIOLOGICAL AND FIRE EMERGENCY CABINET

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED ++</u>
Air Purifying Respirator	5	5
Respirator Filter	10	10
Battery, 6 Volt Lantern		5
Battery, D Cell		1
Bolt Cutter		1
Chain Wrench		1
Sledge		1
Fire Axe		1
Pinch Bar		1
Hacksaw Frame/Blade		1
Pocket Knife		1
Fire Hose Wrench	5	5
Pipe Wrench	1	2
6 Volt Lantern	5	5
Safety Harness	5	5
Nylon Rope, 100 Feet		1
Leather Gloves	5 Pair	5 Pair
High Voltage Gloves & Leather Covers		1 Pair
Fireman Turnout Gear	5 Sets	5 Sets
- Boots		
- Coats		
- Hood		
- Gloves		
- Helmet/Shield		
Scott Air Pack	5	5
Scott Spare Bottles		5
Protective Clothing	5 Sets	5 Sets
- Coveralls		
- Rubber Boots		
- Plastic Booties		
- Glove Liners		
- Rubber Gloves		
- Hood/Cap		

Attachment 6.1-1
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ITEMS IN/NEAR
RADIOLOGICAL/FIRE EMERGENCY CABINET AND VAN (Contd.)

WNP-2 RADIOLOGICAL AND FIRE EMERGENCY CABINET

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED ++</u>
Survey Instrument, Dose Rate	1	1
Survey Instrument, Count Rate (GM Pancake Probe)	1	1
Masking Tape		1 Roll
Pocket Dosimeters, 200 R	5	5
Dosimeter Charger		1
Iodine Tablets (<u>OSC only</u>)	2 Bottles	4 bottles
+ Silver Zeolite Cartridge (Iodine Sampling)		6
+ The Silver Zeolite Cartridges are in the OSC kit <u>only</u> (Kit 1E).		
++ Includes required quantities		

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ITEMS IN/NEAR
RADIOLOGICAL/FIRE EMERGENCY CABINET AND VAN (Contd.)

WNP-2 FIRE RESPONSE VAN

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u> +
Turnout Gear	5 Sets	5 Sets
Coat		
Helmet		
Boots		
Gloves		
Scott Air Packs	5	5
Spare Bottles for SCUBA		5
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
Flashlights	5	5
Bolt Cutter		1

+ Includes required quantities

INSTRUCTIONS

RADIOLOGICAL/FIRE EMERGENCY CABINET AND VAN (Contd.)

Locations:

- Kit 1E - Service Building, 441' elevation, Operation Support Center (OSC)
- Kit 2E - 441' elevation, Radwaste/Reactor Building Laundry Room
- Kit 3E - 471' elevation, Radwaste/Turbine Generator Building Corridor
- Kit 4E - 501' elevation, Radwaste/Turbine Generator Building Corridor at Control Room Door
- Kit 5E - 487' elevation, Radwaste Building, outside Chemistry Laboratory
- Fire Response Van - WNP-2 Protected Area

Monthly (and after use):

- Verify spare air bottles full
- Inspect Scott Air Packs
- Verify calibration/expiration dates will not be exceeded prior to next monthly check:
 - Portable instruments
 - Iodine tablets (OSC only)
 - High voltage gloves
 - Fire extinguishers (Van only)
- Inventory Contents
- Perform operational checks
 - Dosimeters (re-zero)
 - Portable instruments (battery check)
 - Six-volt battery lanterns/flashlights
- Check physical condition of cabinet/van contents and replace items, as necessary

Attachment 6.1-1

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ITEMS IN/NEAR
DECONTAMINATION KITS

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u> +
Body Outline Forms	4	6
Facial Tissue		2 Boxes
Collodion		1 Bottle
Cotton Rolls or Balls		2 Boxes
Cotton Tip Applicators		100
Decon. Detergent		1 Bottle
Gauze Sponge		50
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
Tongue Depressor		10
Disposable Toweling (RW 487' only)		1 Set

+ Includes required quantities.

INSTRUCTIONS

DECONTAMINATION KITS (Contd.)

Locations:

- Kit 1D - Radwaste Building, 487' elevation, Men's Locker Room
- Kit 2D - Radwaste Building, 487' elevation, Women's Locker Room

Quarterly (and after use):

- Inventory contents.
- 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
K.E.D. Extrication Device		1
Emergency Life Saver Kit (Airways)		1
Burnsheets		2
Ladder Splints		2
Ambulance Blankets		2
Child Birth 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) (Contd.)

Locations:

- Kit 1FA - Service Building, 441' elevation, Operations Support Center (OSC)
- Kit 2FA - 441' elevation, Radwaste/Reactor Building Laundry Room
- Kit 3FA - 471' elevation, Radwaste/Turbine Generator Building Corridor
- Kit 4FA - 501' elevation, Radwaste/Turbine Generator Building Corridor near Control Room Door
- Kit 5FA - First Responder Van

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 (<u>NOTE</u> : No stretcher at Kit 3FB.)		1
Blankets (Disposable)		2
CPR Micro-Shields/Pocket Mask		3
Oxygen Bottle (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 (Contd.)

Locations:

- Kit 1FB - Service Building, 441' elevation, Operations Support Center (OSC)
- Kit 2FB - 441' elevation, Radwaste/Reactor Building Laundry Room
- Kit 3FB - 467' elevation, Radwaste Control Room
- Kit 4FB - 471' elevation, Radwaste/Turbine Generator Building Corridor
- Kit 5FB - 501' elevation, Radwaste/Turbine Generator Building Corridor at Control Room Door
- Kit 6FB - 487' elevation, Radwaste Building Outside Chemistry Laboratory
- Kit 7FB - First Responder Van

Monthly (and after use):

- Inventory contents.
- Check physical condition of contents and replace items, as necessary.
- Verify oxygen bottle is full (needle in green band). If low, replace with a full one.
- Perform operational check on penlights, (if 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	25
Combination Filters		
(respirator)	20	50
Pocket Dosimeters	10	25
Dosimeter Charger		1
Dose Rate Instruments	1	2
Potassium Iodide Tablets	2 bottles	10 bottles
Duct Tape		1 roll
Masking Tape		1 roll

+ Includes required quantities.

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INSTRUCTIONS

EMERGENCY PROTECTIVE EQUIPMENT KIT (TSC) (Contd.)

Location:

- Technical Support Center

Monthly (and after use):

- Inspect respirators
- Verify calibration/expiration dates will not be exceeded prior to next monthly check:
 - Portable instruments
 - Potassium iodide tablets
- Inventory Contents
- Perform operational checks
 - Dosimeters (re-zero)
 - Portable instruments (battery check)
- Check physical condition of cabinet contents and replace items, as necessary

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PLANT EMERGENCY ALERTING SIGNALS

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 - 1300

Swing Shift - 1700

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 5-10 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 6.1-6

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EOF/HEADQUARTERS EMERGENCY EQUIPMENT

- 6.2-1 Field Sampling Kit
- 6.2-2 Protective Clothing Kit
- 6.2-3 Air Sampling Kit
- 6.2-4 Instrumentation Kit
- 6.2-5 Decon Cabinet
- 6.2-6 Extra Protective Clothing
- 6.2-7 River Evacuation Monitoring Kit
- 6.2-8 River Evacuation Decontamination Kit
- 6.2-9 Decon Storage Trailer
- 6.2-10 Equipment for PASS

Attachment 6.2

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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 (perm).		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 (Contd.)

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 - Headquarters, Cabinet Number 4, Headquarters 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.

INSTRUCTIONS

PROTECTIVE CLOTHING KIT (Contd.)

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 - Headquarters, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents.
- 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.

INSTRUCTIONS

AIR SAMPLING KIT (Contd.)

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 - Headquarters, Cabinet Number 4, MPF, 1st Floor, Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents.
- Check physical condition of contents and replace, as necessary .
- Verify air sampler calibration date will not be exceeded prior to the next quarterly check.
- 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.

Attachment 6.2-3

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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
TLD Badges		2
Portable Radio and microphone (Headquarters kit only)		2
AC Radio Charger		1
++ Check Source Cs-137		1
Desiccant		1
KI Tablets	2 bottles	3 bottles
Calculator		1
D-Cell Batteries		8
9-Volt Batteries		2
Note Pads (3x5)		3
Pens (black)		3
Compass		1
Battery Lantern (D - Cell)		1
Flashlight		1
WA State Road Atlas (In lid pocket of equipment case)		1
Packet Containing (In lid pocket of equipment case)		1
- Change		\$5.00
- Credit Cards (1 Each: Shell, Chevron)		2
Wood Stakes, Survey Markers (In Cabinet)		10
First Aid Kit (In Cabinet)		1

+ Includes required quantities.

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

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INSTRUCTIONS
INSTRUMENTATION KIT (Contd.)

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 - Headquarters, Cabinet Number 4, MPF, 1st Floor, Outside Room 201

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

- Inventory contents.
- Check physical condition of contents and replace, as necessary.
- Ensure portable instrument calibration dates will not be exceeded prior to the next quarterly check.
- 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 and batteries in Headquarters Kit (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>
Decon Record Forms		
• Personnel Contamination Form		20
• Personnel Clothing Contamination Form		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
Tongue depressants		20
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
Potassium Permanganate		2 bottles
Sodium Bisulfite		2 bottles
Kim Wipe Tissue		1 box
Collodion		1 bottle
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 (Contd.)

Location:

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

Quarterly (and after use or if seal not intact):

- Inventory contents.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check:
 - 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.

INSTRUCTIONS

EXTRA PROTECTIVE CLOTHING (Contd.)

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.
- 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>
TLD		3
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	1 bottle	1 bottle
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		1 Pad

+ Includes required quantity.

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

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INSTRUCTIONS

RIVER EVACUATION MONITORING KIT (Contd.)

Location:

- Kit 1RM - Cabinet Number 4, Headquarters MPF, 1St Floor, Outside Room 201

Quarterly (or after use or if seal not intact):

- Inventory contents.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check.
- Perform operational checks:
 - Portable instrument (battery check)

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.)
- Determine from Supervisor, Vehicle Maintenance, if any headquarters pool vehicle keys in the emergency equipment cabinet need to be changed.

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ITEMS IN/NEAR
RIVER EVACUATION DECONTAMINATION KIT

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED +</u>
TLD		3
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	1 bottle	1 bottle
Pens		5

+ Includes required quantity.

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

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INSTRUCTIONS

RIVER EVACUATION DECONTAMINATION KIT (Contd.)

Location:

- Kit 1RD - Emergency Cabinet Number 4, Headquarters MPF, 1St Floor, Outside Room 201

Quarterly (and after use or if seal not intact):

- Inventory contents.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check.
- Perform operational checks:
 - Portable instrument (battery check)

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 TRAILER

<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/G-M 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	1 bottle	3 bottles
Sodium Bisulfate capsules		100
Potassium Permanganate capsules		100
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
Generator (Gasoline)		1
Fire Extinguisher		1

+ Includes required quantities.

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ITEMS IN/NEAR
DECON STORAGE TRAILER (Contd.)

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED</u> +
TLDs		4
Pocket Dosimeter (0-500 mR)		4
Generator Kit (with spare fuses)		1
Gasoline can		1
Syphon		1
Legal pads		1 box
Pens		2 boxes
Clipboards		5
Emergency Response Log		1 pad

+ Includes required quantities.

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INSTRUCTIONS

DECON STORAGE TRAILER (Contd.)

Location:

- ROC Warehouse Storage Lot

Quarterly (and after use or if seal not intact):

- Inventory contents.
- Check physical condition of contents and replace, as necessary.
- Ensure calibration/expiration dates will not be exceeded prior to next quarterly check:
 - Portable instruments
 - Chemicals
 - Iodine Tablets
- Perform operational checks:
 - Portable instrument (battery check)
 - Dosimeter charger
 - Portable generator (Start-up)

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EQUIPMENT FOR 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
- Check physical condition of contents and replace, as necessary

+ Includes required quantities.

Attachment 6.2-10

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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
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.

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INSTRUCTIONS

HOSPITAL RADIOLOGICAL EMERGENCY KIT

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.
- 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.

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EMERGENCY PLANNER COMMUNICATIONS SYSTEM TESTS

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/Franklin County
 - d. 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, Rockville, Maryland, via standard telephone using the numbers provided in the Emergency Phone Directory.

Quarterly:

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

Attachment 6.4

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COMMUNICATIONS SYSTEM TESTS

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 (Olympia)
- County Emergency Operations Center, (Kennewick)
- Department of Energy-Richland (DOE-RL)

Monthly:

- Perform operational check of the facsimile transmission network by two-way transmission.

B. Siren System (Required)

Monthly:

- Document performance of weekly siren system status tests.

Quarterly:

- Perform siren system electronic relay test (i.e., on older siren systems this was referred to as a growl test).

Annually

- Perform full operational test of siren system.

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COMMUNICATIONS SYSTEM TESTS (Contd.)

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 Supply System facilities by ensuring terminals in the TSC and EOF are accessing plant data. Δ {3.1}

E. EOF and Industrial Area/Warehouse Complex Public Address System (Required)

Monthly:

- Perform operational check.

F. Field Team Radios (Required)

Monthly

- Perform operational check on portable radios and batteries.

Annually:

- Check per FCC requirements.

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COMMUNICATIONS SYSTEM TESTS (Contd.)

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 (4)

Monthly:

- Perform operational check (by two-way transmission) on all channels.

I. Pagers (Required)

Quarterly:

- Perform quarterly activation test.

J. Auto Dialer (Required)

Quarterly:

- Perform quarterly activation test.

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COMMUNICATIONS SYSTEM TESTS (Contd.)

K. Radio Controllers (Required)

Locations:

- MDA1 - Dose Assessment
- MDA2 - Dose Assessment
- 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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EOF MEDICAL EQUIPMENT AND SUPPLIES

ITEMS IN/NEAR
EOF FIRST AID ROOM

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED ++</u>
Clamshell w/Spider Straps		1
Stiff-Neck Collar - Tall		1
Stiff-Neck Collar - Regular		1
Stiff-Neck Collar - Short		1
Stiff-Neck Collar - No-Neck		1
Ring		1
Set of Airways		1
K. E. D.		1
Sager Splint		1
SAM Splint		1
Ladder Splint		1
Burn Sheet		1
OB Kit		1
Red Bio Hazard Bags		2
Blankets		2
Cold Packs		2
Multi-Trauma Dressing		2
V-Vac Replacement Cartridge		1
Patient Information Sheets		Several

GRAY KIT (ONE)

Band Aids	Several
4x4 Dressing	Several
Scissors	1
Kling	4
Triangular Bandages	6
Rubber Gloves	3 pr.
Face Shields (Barriers)	2
Emergency Blanket	1
Glucose	1 tube
B/P Cuff	1
Stethoscope	1
Pen Light	1
2 inch Tape	1 roll
Pen	1
Patient Info Sheet	2

EOF MEDICAL EQUIPMENT AND SUPPLIES (Contd.)

ITEMS IN/NEAR
EOF FIRST AID ROOM

<u>ITEM</u>	<u>REQUIRED</u>	<u>DESIRED ++</u>
<u>OXYGEN KIT (ONE)</u>		
Kit w/Regulator		1
Nasal Cannual		1
Oxy Mask w/Bag		1
<u>Large Gray Box</u>		
V-Vac		1
Bag Valve Mask		1
Pocket Mask		1
Kling Bandages (Assorted boxes)		2
Telfa Pads (Sterile) (Assorted boxes)		1
Coban Wrap Bandages (Assorted boxes)		1
Knuckle Dressing		4
Band aids (Assorted)		24
ABD Dressings (Trauma)		10
Triangular Bandages		10
Tape, Paper (Adhesive) (Assorted rolls)		6
Eye Pads (Dressings)		10
Pads (Bulk) (Assorted packages)		2
Scrub Brush (Soft)		4
Cotton Applicators (box)		1
Alcohol Wipes (box)		2
Burn Sheets (Sterile)		2
Surgical Gloves		12 pr
+ Antiseptic Scrub (bottles)		2
+ Bacitracin (tubes)		2
+ Instant Glucose (tubes)		3
Oxygen and Oxygen Equipment:		
Portable "D" Bottle with Regulator		1
Face Masks		6
+ Eye Irrigation Dacriose Solution		3
Pen Light and Spare Batteries		3
Bandage Scissors (5-1/2")		1
Stretcher (Gurney) with Casters		1
Pad (Stretcher) (3" Foam)		1
Back Board		1
Blood Pressure Cuff		1
Stethoscope		1
Extraction Scissors		1

+ Indicates item has shelf life expiration date

++ Includes required quantities

Attachment 6.6

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EOF MEDICAL EQUIPMENT AND SUPPLIES (Contd.)

INSTRUCTIONS

Quarterly (and after major use):

- Verify oxygen bottle full (needle is the green band). If low, replace with full one.
- Check oxygen regulator.
- Inventory contents.
- 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 audit.
- Perform operational checks:
 - Penlight

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EMERGENCY CENTER EQUIPMENT AND SUPPLIES

- 6.7-1 Instructions Emergency Centers
- 6.7-2 Control Room Inventory List
- 6.7-3 Technical Support Center Inventory List
- 6.7-4 Operations Support Center Inventory List
- 6.7-5 Emergency Operations Facility Inventory List
- 6.7-6 Security Communications Center Inventory List
- 6.7-7 EOF Engineering Library Inventory List
- 6.7-8 Joint Information Center Inventory List

Attachment 6.7

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INSTRUCTIONS

EMERGENCY CENTERS

Quarterly:

- Inventory.
- 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.

Attachment 6.7-1

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CONTROL ROOM

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> +
GDS Terminal	1	1
WNP-2 Emergency Plan		1
Emergency Plan Implementing Procedures (Vol. 13)	1 Set	1 Set
Emergency Phone Directory	1	2
Emergency Notification Forms	25	50
After Action Report Forms		25
Emergency Response Log		1 Pad
Potassium Iodide Bottles	2 Bottles	7 Bottles
Facsimile Machine	1	1
Facsimile Machine Spare Paper Roll	1	2

+ Includes required quantities.

Attachment 6.7-2

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TECHNICAL SUPPORT CENTER

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
GDS Terminal and CRT Display	2	2
Printer/Plotter Device (Model CI 600)	1	1
Harris Terminal and CRT Display	1	1
(for Document Control System Access)		
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
Portable Emergency Lights (flashlights)	2	6
Emergency Equipment Cabinet Key Box Mounted on Side of Cabinet	1	
(Key is there and glass front is intact)		
Staff Manning Chart		1
Emergency Classification Status 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 plant records management organization.
 ++ Includes required quantities.

Attachment 6.7-3
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TECHNICAL SUPPORT CENTER

INVENTORY LIST (Contd.)

<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 Display		1
FAX Machine	1	
WNP-2 Emergency Plan		1
INPO Resources Manual		1
Emergency Phone Directories (CC#s 30, 31, 32, 33, 34)		5
Cordless PA Microphone		1
Scientific Calculator		2
Individual Position Specific Procedures for the Following:		
TSC Manager	1	
Technical Manager	1	
Operations Manager	1	
Radiation Protection Manager	1	
Maintenance Manager	1	
Plant Administration Manager	1	
Plant/NRC Liaison	1	
Information Coordinator	1	
Rad Data Coordinator	1	
TSC Manager Secretary	1	
Potassium Iodide Tablets (bottles)		3

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OPERATIONS SUPPORT CENTER

INVENTORY LIST

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 shall be relocated from the primary OSC to the Alternate OSC location.

<u>Item</u>	<u>Required</u>	<u>Desired</u> ++
WNP-2 Emergency Plan (CC# 42)		1
Emergency Plan Implementing Procedures (Vol. 13)	1 Set	1 Set
Emergency Phone Directory (Copy 28, 29)	1	2
WNP-2 Shielding Evaluation Report	1	1
Staff Manning Chart		1
Emergency Classification Status Board		1
Plant Status Board		1
OSC Team Locator Tiles		1
HP Survey/Hazardous Area Maps		1 Set
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
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 6.7-4

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EMERGENCY OPERATIONS FACILITY

INVENTORY LIST

<u>Item</u>	<u>Required</u>	<u>Desired</u> +
WNP-2 Emergency Plan:		2
Emergency Operations Area (Copy 37)		
Dose Assessment Area (Copy 38)		
Emergency Plan Implementing Procedures: (Vol. 13)	2 Sets	3 Sets
Emergency Operations Area (Copy 94, 97)		
Dose Assessment Area (Copy 83)		
Emergency Phone Directory:	5	12
Emergency Operations Area (Copy 38-45)		
Dose Assessment Area (Copy 50, 51)		
Logistical Support Area (Copy 48, 49)		
INPO Emergency Resources Manual		1
NRC Telephone Directory		1
Washington State Road Atlas		2
EOF Manning Charts		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	25	50
After Action Report Forms		50
Binder Containing Maps of Local Areas	1	2
Information Coordinator Remote Headset	1	1
Single Station Wireless Headset Fanny Pack Unit		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/Franklin County Emergency Plan	1 Set	1 Set
Washington State Emergency Plan		1
FEMA Manual for Guidance on Offsite Emergency		
Area Radiation Monitor (Victoreen)		1

+ Includes required quantities.

Attachment 6.7-5

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EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Contd.)

<u>Item</u>	<u>Required</u>	<u>Desired +</u>
GDS Terminal (RAMTEK)	1	2
Televideo CRT Display Terminals	2	3
Printer/Plotter Device	1	1
LAN Laser Printer	1	1
NEFAX Paper (Spare)		1 Roll
Overhead Projector		1
Dose Projection PCs	2	3
External Modem for Met. Data		1
KI Tablets	10 bottles	20 bottles
Evacuation Time Study		1
EDPS User's Manual		1
State Response Procedures for Radiation Emergencies (Copy 105, 106)		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
WNP-2 Site Map		1
Plume EPZ Field Team Display Map		1
Plant 2 Vicinity Map		1
Meteorological and Plume Data Status Board		1
Radio Console with Microphone (MDA I and MDA II)	2	2
Radio Console (Weather Station Monitor)		1
Radio Dispatch Headset (with push-to-talk clip-on adapters, in cabinet)		2
Packets containing Applicable Field Team PPM and HPI 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 Forms		1 in each Field Team Packet
Computer disk storage container (with BEDPS backup disk)		1

+ Includes required quantities

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

Attachment 6.7-5

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EMERGENCY OPERATIONS FACILITY

INVENTORY LIST (Contd.)

<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		
+ Includes required quantities		

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SECURITY COMMUNICATIONS CENTER

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
Emergency Notification Forms	25	50
After Action Report Forms		25
Emergency Response Log		1 Pad

+ Includes required quantities.

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EOF ENGINEERING LIBRARY

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
Harris Terminal (RMCS/DCS Access)		1
INPO Emergency Resources Manual		1
Set of AED/CVI Aperture Cards		1 Set
Document Control System (DCS) List		1
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/Franklin Counties Emergency Response Plan (Controlled Manual Holder's Copy No. 30)		1

+Quarterly

Ensure that document contains the most recent published revision.

++ Includes required quantities.

Attachment 6.7-7

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JOINT INFORMATION CENTER

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	2
Media Information Packages		15
Slides Representing Plant Systems		1 Set
Clock (24 hour display)		1
Emergency Classification Status Board		3
TV Monitor		3
EBS Radio Monitor		3
Fifty-Mile Emergency Planning Ingestion Zone Map		1
Ten-Mile Emergency Planning Plume Zone Map		1
Evacuation Route/Assistance Center Map		3
Staffing Roster		1
After Action Report Forms		25
Emergency Response Log		1 Pad
Binder Containing Maps of Local Areas		1

+ Includes required quantities.

Attachment 6.7-10

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VENTILATION RADIATION MONITORING

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 tickler card and the data sheet, File 963.5.2.2.

Attachment 6.8

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FACILITIES SYSTEMS TESTS

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 Data Sheet in possession of Health Physics Services.

B. Diesel Generators (Required)

Locations:

- Headquarters (HQ)
- 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 6.9

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1.0 PURPOSE

This procedure lists the Supply System's Emergency Response Organization (ERO) and identifies responsibilities for the administration, participation, and training of the ERO.

2.0 DISCUSSION

2.1 The Supply System's ERO consists of positions that satisfy Emergency Preparedness Plan requirements for initial and augmenting staffing during declared emergency events as well as positions that may be summoned as needed. Refer to the ERO assignment list contained in Emergency Telephone Directories to identify individuals who staff the positions. The positions are arranged in the following response categories:

2.1.1 Onshift

Consists of plant positions staffed by shift personnel that satisfy technical specification or security plan requirements for the normal conduct of plant operations. In a declared emergency, shift personnel provide initial staffing for certain emergency positions identified by the Emergency Preparedness Plan. In certain cases, shift personnel may satisfy staffing requirements for more than one emergency position identified in the Plan such as Equipment Operators performing emergency maintenance tasks as well as performing as fire brigade members.

2.1.2 Essential

Consists of positions designated on a rotating oncall list that can be summoned by electronic means to respond within a specified time. Essential ERO personnel will normally augment onshift personnel to provide assessment and mitigation of accident conditions, notifications to offsite agencies, or provide overall direction, control and logistical support for emergency operations.

2.1.3 Augmenting

Consists of positions designated on a rotating oncall list that can be summoned by electronic means to respond within a specified time. Augmenting personnel provide additional emergency assessment, accident mitigation and logistics support to onshift and essential personnel.

2.1.4 Support

Consists of positions which may or may not be designated on a rotating oncall list or ERO assignment list, but which may be summoned by electronic or manual means when needed to support emergency operations.

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