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Monticello Nuclear Generating Plant
Operated by Nuclear Management Company, LLC

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U.S. Nuclear Regulatory Commission
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Monticello Nuclear Generating Plant
Docket 50-263
License No. DPR-22

Emergency Plan Implementing Procedures

Enclosed with this letter are revisions to the Monticello Nuclear Generating Plant (MNGP) Emergency Plan Implementing Procedures. The following procedures are revised:

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A.2-107	Activation and Operation of the OSC	23
A.2-213	Responsibilities of the Emergency Director	11
A.2-413	Small Volume Liquid Sample Obtained at the Post Accident Sampling System	17
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A.5-400	Contaminated Patient Transfer	4
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Please post changes in your copy of the MNGP Emergency Plan Implementing Procedures manual. The superseded procedures should be destroyed.

These revisions do not reduce the effectiveness of the MNGP Emergency Plan.

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Enclosure

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1.0 PURPOSE

This procedure provides instructions for the staffing, activation and operation of the Technical Support Center (TSC) in the event of an emergency at the Monticello Nuclear Plant.

2.0 APPLICABILITY

An emergency condition corresponding to an ALERT classification or higher has been declared at the Monticello Nuclear Plant.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Emergency Director is responsible for:

3.1.1 Overall coordination and direction of the utility emergency response activities at the TSC.

3.2 The Support Group Leader is responsible for:

3.2.1 Implementation of this procedure and overall coordination of TSC activation and operation.

3.2.2 Coordination of initial TSC staffing, coordinate FFD evaluation during initial TSC staffing and coordinating the establishment of ERO shift schedules for protracted events.

3.2.3 TSC access including establishment of the TSC access point, Emergency Ventilation System (EVS) operation, personnel ingress, radiological monitoring and badging.

3.2.4 Coordination of administrative support in the TSC including recorders, switchboard, chronological flipchart, document control and distribution.

3.2.5 Coordination of emergency procurement and logistics for the TSC.

3.2.6 Liaison with State, Local, or Federal agency personnel (e.g. NRC, etc.) responding to the TSC.

4.0 DISCUSSION

The Technical Support Center (TSC) is located on the second floor of the plant Administration Building and is approximately 1800 sq. ft in size. This procedure provides instructions for the activation, staffing and operation of the TSC. The Support Group Leader is responsible to coordinate the activities governed by this procedure.

This procedure consists of instructions for which the Support Group Leader is ultimately responsible. Specific functions contained in this procedure may be assigned to other individuals from the various groups which comprise the Support Group. In these cases, the suggested group to perform the function is identified within parentheses immediately after the instruction, however, other assignments may be dictated by the level of staffing in these groups.

Section 6.1 provides instructions for initial facility activation and staffing including verification of fitness-for-duty of personnel reporting to the TSC. Section 6.2 provides instructions for the establishment of shift schedules for ERO personnel in the event of a protracted emergency. Section 6.3 provides instructions for those activities that should be performed continually while the TSC is in operation. Section 6.4 contains instructions for TSC activities required for plant (or site) evacuation including the personnel accountability process (in the TSC). Section 6.5 contains instructions related to monitoring and controlling TSC habitability and personnel monitoring (dosimetry) in the TSC. Section 6.6 provides general instructions for logistics and emergency procurement.

5.0 PRECAUTIONS

5.1 The TSC facility may be used for normal daily operations, training or emergency drills provided that these activities do not interfere with the timely activation or continued operation of the TSC in the event of an emergency.

5.2 The TSC and OSC staff may consist of female plant personnel of child bearing age (i.e., may be limited to 20 mrem/month) and/or personnel without Basic Rad Worker Training (i.e., not trained to perform whole body frisking, etc). Consideration should be given to these personnel in the event of an emergency which involves elevated radiation levels or significant radiological consequences.

6.0 INSTRUCTIONS

6.1 Initial Activation and Staffing

6.1.1 Upon notification of an emergency, refer to the main ERO Tagboard to determine Support Group Leader assignment in accordance with procedure A.2-001 (EMERGENCY ORGANIZATION).

6.1.2 Proceed to the TSC and obtain the Support Group Leader log book, 3-ring binder, and ball-cap from the TSC bookcase and assume the duties of Support Group Leader.

6.1.3 Obtain the keys for the TSC bookcase from the Emergency Key Cabinet in the TSC Communications Room. Unlock both TSC bookcase doors and the Technical Manual File Cabinets.

6.1.4 Initiate and maintain the Support Group Leader Log in accordance with procedure A.2-502 (RECORD KEEPING DURING AN EMERGENCY).

6.1.5 Obtain Form 5790-106-01 (SUPPORT GROUP LEADER CHECKLIST) from the TSC controlled forms file and initiate the checklist.

CAUTION

Do not operationally test the TSC Accountability Card Reader while the security computer is being placed in the "accountability" mode. Security badge insertion during system reconfiguration may result in system failure or delays in the accountability process.

6.1.6 Verify the TSC Accountability Card Reader is operational by inserting your security badge and observing the indicating light change from red to green and back to red.

6.1.7 As TSC Group Leaders report to the TSC, ensure each group leader has the following materials

A. Group Leader Log Book and 3-ring binder (specific EPIPs and Forms).

B. Emergency Plan Implementing Procedures (EPIPs) Manuals.

C. Group Leader ball-cap.

D. Emergency Director gavel.

E. Sufficient stationery and supplies including forms from the TSC controlled forms file.

6.1.8 As Support Group personnel become available, assign personnel to perform the following functions:

A. Setup and maintain the TSC Events Flipchart (stored by TSC bookcase).

B. Maintain the TSC Emergency Organization Status Board (located in front, right of the TSC).

C. Recorder for the Emergency Director and maintain the Emergency Director Log in accordance with A.2-502.

1. Obtain a copy of the Monticello Station Log (for the current shift only) and deliver to the Emergency Director.

D. Document control and administrative support in the TSC and OSC (including Warehouse support in the OSC).

6.1.9 Assist radiation protection with setup and activation of the TSC/OSC PIOPS Continuous Air Monitor (CAM) in the hallway adjacent to the elevator (the CAM is normally stored in the TSC).

6.1.10 When directed by the Radiological Emergency Coordinator (REC) coordinate establishing the EFT/EVS boundaries by closing and posting all EFT/EVS boundary doors, (identified on FIGURE 7.1) and activate the EVS in accordance with Section 6.7of this procedure.

6.1.11 If the event is occurring off-hours (i.e., ERO personnel are called in), verify personnel reporting to the TSC are fit-for-duty in accordance with FFD requirements using the following methods as necessary:

NOTE: The fitness of individuals should be assessed prior to their engaging in safety-related emergency response activities. The fitness-for-duty assessment should include, at a minimum, a determination of whether individuals have consumed alcohol within the last 5 hours.

A. Question individuals as they arrive in the TSC, or,

B. During initial staffing, make announcements in the TSC (in conjunction with status updates) requesting personnel that are not fit-for-duty or that have consumed alcohol within the last five hours identify themselves.

6.1.12 Coordinate the disposition of personnel that indicate they are not fit-for-duty or that have consumed alcohol within the last five hours as follows:

A. Evaluate whether the individual is essential to the emergency response and the individuals' ability to perform assigned functions.

B. Individuals that are considered essential to emergency response should be immediately tested for BAC (i.e., breathalyzer).

1. Individuals whose test results are less than FFD Guidelines (i.e., 0.04 BAC) may engage in emergency response activities.

2. Individuals whose test results exceed FFD Guidelines should be evaluated to determine if they are able to perform their assigned functions, and if so, may be assigned emergency response duties under supervision.

C. Non-essential personnel may be directed to a waiting area (e.g., Lunchroom), sent home or evacuated if a plant or site evacuation is conducted. Personnel assigned to the next shift should be directed in accordance with Section 6.2.

D. Coordinate any FFD testing that may be required (e.g., breathalyzer analysis) with the Security Group Leader.

6.1.13 Initiate Form 5790-106-02 (TSC STAFFING AND ORGANIZATION CHART) and establish minimum TSC staffing as follows:

A. Check Main ERO Tagboard to confirm key TSC positions identified on the chart are staffed.

B. Check on status of staffing various TSC groups with the respective TSC group leader. Coordinate contacting additional personnel as requested by the group leaders.

C. Complete the TSC STAFFING AND ORGANIZATION CHART with the names of qualified, fit-for-duty personnel from the tagboard or present in the TSC.

6.1.14 When all positions, denoted on the TSC STAFFING AND ORGANIZATION CHART as "minimum staffing requirements", are filled, inform the Emergency Director that TSC minimum staffing is complete and the TSC may be declared Activated.

6.1.15 When TSC minimum staffing is complete prompt the Emergency Director to make an announcement in the TSC that the TSC is Activated.

6.1.16 Continue to establish full TSC staffing by filling all remaining positions identified on the TSC STAFFING AND ORGANIZATION CHART. When all positions are filled, inform the Emergency Director the TSC is fully staffed.

6.1.17 When TSC staffing is complete (i.e., all positions on the TSC STAFFING AND ORGANIZATION CHART are filled), direct excess personnel as follows:

A. If in an ALERT, personnel may return to their normal work duties (restricted to activities outside the Controlled Area depending on the nature of the event).

B. If a Plant (or Site) evacuation is ordered (i.e., a SITE AREA or GENERAL EMERGENCY declared), excess personnel should be evacuated with other non-essential personnel. Prior to their release from the Assembly Point (or departure from the site) 24-hour shift staffing should be considered in accordance with Section 6.2.

6.2 ERO Shift Scheduling

6.2.1 If the duration of the event could exceed 12 hours, evaluate the TSC staffing required to support 24-hour coverage. Assist the TSC Group Leaders with the assignment of "next shift" personnel as follows:

A. Obtain Forms 5790-106-03 through 5790-106-08.

NOTE: The Support Group ERO Shift Schedule includes the TSC Group Leader positions in addition to the other support group positions. The Support Group Leader should coordinate the TSC group leader assignments with the Emergency Director

B. Establish a date and time the next shift is to begin and record the date and time of the on-duty shift and the next shift in the spaces provided.

C. Issue the shift schedules to the respective group leaders and instruct them to identify the present ERO shift and assign the next shift personnel (in their group) for each position identified on the shift schedule.

D. Instruct group leaders to consult Form 5790-001-01 (EMERGENCY RESPONSE ORGANIZATION) to identify qualified individuals.

E. Collect the completed ERO Shift Schedules and review for completeness.

F. Make two copies of the completed ERO Shift Schedules and distribute as follows:

1. Retain the original set of ERO Shift Schedules.

2. Provide a copy of all ERO shift schedules to the Security Group Leader and instruct them to forward the copies to the Security Building.

3. Return one copy of the ERO Shift Schedule to the respective TSC group leader (i.e., REC gets RP & Chemistry ERO Shift Schedule, etc.).

G. The completed ERO Shift Schedules should be used to inform next shift ERO personnel of their scheduled work times.

6.2.2 If a plant (or site) evacuation is occurring or has occurred (i.e., excess ERO personnel have evacuated to an Assembly Point) and the ERO shift schedules have not been established:

A. Request the Emergency Director (and REC) delay the release of evacuees from the Assembly Point until next shift ERO assignments are made.

B. Complete the ERO Shift Schedules in accordance with Section 6.2.1.

C. Ensure evacuees that are assigned to the next ERO shift are informed and they are provided instructions for site access when returning to the plant (i.e., Company ID badge required for site access).

6.2.3 Coordinate the departure of next shift ERO personnel as follows:

A. Ensure ERO personnel are informed of their next ERO shift in accordance with the completed shift schedules.

B. Ensure personnel are instructed to contact the plant if their final destination, after departing the site, is a location other than their permanent residence. In this case, they should provide a phone number at which they can be reached if needed sooner than their next scheduled shift.

C. Next shift ERO personnel should depart the site as follows depending on the situation

1. Normal departure:

If the emergency classification is ALERT or no plant (or site) evacuation is being conducted, next shift personnel should depart the site using normal departure procedures.

2. Evacuation:

If a plant (or site) evacuation is being conducted, the departure of next shift ERO personnel should be coordinated with the other evacuees.

6.2.4 If, after initial staffing is established, additional personnel or expertise is needed in the TSC, coordinate contacting additional ERO personnel.

NOTE: Refer to the Monticello and Prairie Island Nuclear Emergency Telephone Directory for telephone numbers

6.3 Operation of the Technical Support Center

NOTE: This section contains activities for which the Support Group Leader is responsible. These activities should be performed continually, as necessary, while the TSC is in operation

6.3.1 Ensure that Emergency Organization Status Board is manned and maintained including (Admin):

A. Emergency Classification.

B. Key ERO assignments.

C. Responsibility for off-site communications (TSC or EOF).

6.3.2 Ensure the TSC Events Flipchart is manned and maintained in accordance with Section 6.8.1.

6.3.3 Ensure the Recorder for the Emergency Directory is manned and that the Emergency Director Log is maintained in accordance with A.2-502 and Section 6.8.2.

6.3.4 Keep the TSC clear of unassigned or unnecessary personnel and equipment which may interfere with the TSC operation.

6.3.5 Coordinate periodic general status PA announcements as follows:

A. The Lead EC (or designated EC) and Support Group Leader should compose an announcement which consists of accurate, factual information.

B. The announcements should be performed by an Emergency Communicator from a work cubicle outside the TSC to minimize disruption in the TSC.

C. The announcements should include the following information (if applicable):

1. The present emergency classification level and reason for the classification.

2. The status of the reactor (i.e., shutdown, etc.) and the status of any systems critical to safe shutdown or reactor core cooling (e.g., HPCI, RHR, etc.)

3. A brief summary of accident mitigation efforts underway or planned by the TSC and the objectives of those mitigation efforts.

4. A summary of personnel status including the results of personnel accountability, injuries, etc.

6.3.6 Assist the Emergency Director with the conduct of periodic briefings in the TSC as follows:

A. Briefings should be conducted approximately every 30 minutes or as determined by the Emergency Director.

B. During briefings and announcements, the noise level in the TSC should be kept to a minimum and all key TSC Group Leaders should participate.

C. Significant events should be announced in the TSC as they occur.

6.3.7 If a plant (or site) evacuation is conducted, coordinate personnel accountability in the TSC in accordance with Section 6.4

6.3.8 Monitor the results of TSC and Control Room habitability surveys (from the REC) and refer to Section 6.5 for:

A. The establishment of the EFT and EVS boundaries in the event of a radioactive release.

B. The establishment of strict contamination control measures in the EFT and EVS boundaries.

C. Dosimetry issuance to TSC personnel in the event of a plant evacuation or elevated radiation level in the TSC.

6.3.9 Provide logistics support for TSC operation including emergency procurement in accordance with Section 6.6. Coordinate off-site logistics support with the Logistics Coordinator in the EOF (when staffed).

6.4 Evacuation and Personnel Accountability

6.4.1 When the Security Group Leader indicates the security computer and accountability card readers are ready, coordinate the personnel accountability process in the TSC in accordance with step A. If the computer method is not operational refer to step B.

NOTE: When compiling accountability lists, include only those personnel whose whereabouts and physical condition are actually known.

A. If the TSC Accountability Card Reader is operable:

1. Make an announcement within the TSC instructing personnel to:

   a. Give their security badge to the person collecting them but maintain control of their TLD.

   b. Stay in the TSC while the accountability is being completed.

   c. Ensure the correct security badge is returned to them upon completion of the accountability process.

2. Direct a support group member to collect the security badges from personnel in the TSC and insert them into the TSC accountability card reader.

3. When all badges have been entered in the card reader, immediately return them to the individual.

4. Using Form 5790-107-01 (EMERGENCY ACCOUNTABILITY SIGN-IN FORM) prepare a list of personnel assigned to the TSC but not present during the card reader entry process.

5. Immediately forward the completed list to the Security Group Leader.

B. If the TSC Accountability Card Reader is NOT operable:

1. Using Form 5790-107-01 prepare a list of:

a. All personnel in the TSC.

b. Personnel assigned to the TSC but are not present due to an Emergency Work Team task.

2. Immediately forward the completed list to the Security Group Leader.

6.4.2 Dispatch a runner to obtain the completed EMERGENCY ACCOUNTABILITY SIGN-IN FORM from the Control Room and immediately forward the form to the Security Group Leader.

NOTE: Since no accountability card reader exists in the Control Room the accountability process for all operators and personnel assigned to the Control Room will always require completion of an EMERGENCY ACCOUNTABILITY SIGN-IN FORM.

6.4.3 Excess TSC personnel that were released to their normal workstations (at ALERT) should evacuate with other non-essential personnel. Prior to their departure from the Assembly Point (or site) coordinate the assignment of next shift ERO personnel in accordance with Section 6.2.

6.4.4 Upon completion of the accountability process, if continuous personnel accountability in the TSC is desired, initiate a Form 5790-106-10 (EMERGENCY RESPONSE FACILITY SIGN-IN/OUT FORM) for the TSC. Update the log as personnel leave or return to the TSC.

NOTE: The establishment of continuous accountability of TSC personnel should be considered if contamination control is established (by the REC) for the EFT and EVS envelopes. In this case, accountability (i.e. logging personnel in and out) may be performed at the step-pad set-up for entry/exit to the EFT or EVS envelopes.

6.5 Habitability and Personnel Monitoring

NOTE: Upon activation of the TSC, Radiation Protection will conduct periodic habitability surveys of all emergency response facilities including the TSC. The results of these surveys should be posted on the RP Status Board in the TSC.

6.5.1 Periodically review the results of TSC habitability surveys and effluent release levels (both posted on RP Status Board).

6.5.2 When directed by the REC or when radioactive effluent levels exceed the ALERT level (specified in A.2-101 (CLASSIFICATION OF EMERGENCIES)), coordinate the establishment of the EFT/EVS boundaries and activation of the EVS as follows:

NOTE: The REC will recommend manual initiation of the EFT for the Control Room and EVS for the TSC and adjoining areas in the event effluent releases exceed the levels in Guideline 1, Radioactive Effluents of A.2-101 for the ALERT classification.

A. Ensure all EFT and Emergency Ventilation System (EVS) boundary doors (identified in FIGURE 7.1) are closed.

B. Post all EFT and EVS boundary doors (both sides) with EFT/EVS BOUNDARY-KEEP DOOR CLOSED signs.

C. Activate the TSC/BOSC EVS in accordance with Section 6.7.

D. Periodically check the EFT/EVS boundary doors to ensure they are properly closed (and latched).

6.5.3 Assist radiation protection in establishing strict contamination control measures for the EFT/EVS boundaries. as follows:

NOTE: When, during the conduct of habitability surveys, loose surface contamination levels in excess of 1000 DPM/100cm2 are found in the EFT or EVS boundaries, the REC will direct the establishment of strict contamination control measures.

A. Ensure all EFT or EVS boundary doors (identified in FIGURE 7.1) are closed and posted EFT or EVS BOUNDARY-CONTAMINATION CONTROL IN EFFECT-NO ENTRY/EXIT.

B. Assist in the setup of a step-off pad and frisker (Count Rate Meter and 2" Pancake Probe or equivalent) by the West Door next to Elevator.

C. Make an announcement on the Plant PA System that strict contamination control measures are in effect within the EFT or EVS boundaries, all access/egress is through the door by the elevator and all personnel entering should perform a whole body frisk at the step-off pad.

D. Control eating and drinking in the EFT or EVS Boundary Areas until foodstuffs and surfaces are properly monitored for contamination.

E. Consider continuous personnel accountability in accordance with Section 6.4.

NOTE: If personnel have Electronic Dosimeters (ED), another dosimeter is not required.

6.5.4 If dose rates in the TSC (within the EFT or EVS boundaries) are increasing and expected to reach .5 mr/hr, at the discretion of the REC and/or ED, issue dosimetry as follows:

A. Immediately after (or in conjunction with) the personnel accountability process issue one 0-5R dosimeter to each individual in the TSC.

B. Ensure dosimeters are reading less than 1 rem prior to issuance. If not, rezero prior to issuing.

C. Record the dosimetry issuance data including name (or TLD number), dosimeter reading in and dosimeter reading out (when collected) on Form 5790-201-02 (DOSIMETRY ISSUANCE LOG).

NOTE: The REC and/or ED is/are responsible to direct the issuance of dosimetry in manned response centers (TSC, OSC and Control Room) if dose rates in any response center (in EFT/EVS envelope) are increasing and expected to reach .5 mr/hr.

6.5.5 Ensure that all personnel reporting to the TSC (after the dosimetry issuance process) have adequate dosimetry. If not, issue appropriate dosimetry in accordance with Section 6.5.4.

6.5.6 When dosimetry is issued in the TSC in accordance with Section 6.5.4, verify high range dosimetry is issued in other manned emergency response centers as follows:

A. Contact the OSC Coordinator and verify electronic dosimeters or high range dosimeters are issued to all personnel in the OSC.

B. Contact the Shift Manager/Control Room Supervisor and either:

1. Verify electronic dosimeters or high range dosimetry is being issued to the Control Room staff by Radiation Protection personnel from Access Control, or

2. Coordinate the issuance of dosimetry to Control Room personnel yourself. 0-5 R dosimeters are located in the emergency equipment locker in the Control Room. DOSIMETRY ISSUANCE forms are located in the Control Room file drawer labeled Emergency Plan Forms.

6.5.7 Immediately after dosimetry is issued in the TSC and other manned response centers, assist Radiation Protection in the establishment of secondary access control in the Security Building in accordance with A.2-411 (ESTABLISHMENT OF A SECONDARY ACCESS CONTROL) as follows:

NOTE: Upon completion of a plant (or site) evacuation due to radiological exposure concerns, all personnel in on-site manned response centers are issued high range dosimetry. To ensure incoming personnel (on-site and off-site) are properly monitored, a dosimetry issuance station should be established in the Security Building where badged, incoming personnel receive high range dosimetry. If the Security Building becomes uninhabitable, the Dosimetry Issuance Station should be established at the EOF.

A. Upon completion of the dosimetry issuance process, collect all Dosimetry Issuance Forms used to issue dosimetry in the TSC, OSC, Control Room and Access Control and deliver them to the Security Building.

B. If necessary, provide one support group member to assist at secondary access control in the Security Building as follows:

1. For badged personnel entering the Protected Area issue one 0-5 R dosimeter, record the dosimetry data on a Dosimetry Issuance Form and confirm the individual has a TLD on their security badge.

2. Refer individuals that are not badged (at Monticello) to the EOF for access processing (except NRC and off-site emergency response personnel such as Fire Department, LLEA and ambulance personnel).

6.5.8 If elevated dose rates exist outside the Controlled Area, periodically instruct TSC personnel to check their dosimetry for accumulated exposure. These instructions may be provided during the TSC briefings (conducted by the Emergency Director).

6.5.9 If thyroid doses for TSC, OSC, Control Room or Access Control personnel exceed, or are projected to exceed 25 rem, assist the REC in the administration of Potassium Iodide in accordance with A.2-304 (THYROID PROPHYLAXIS).

6.6 Logistics and Emergency Procurement

NOTE: Refer to the Monticello and Prairie Island Nuclear Emergency Telephone Directory for the telephone number of local off-site emergency response organizations, vendor services and federal and state government agencies.

6.6.1 Provide logistics support for the TSC, OSC, Control Room, Access Control and Security Building including:

A. Administrative support including emergency procedure processing, forms completion and status board upkeep.

B. Document control support including records retention, drawing retrieval, etc.

C. Warehouse support including spare parts and equipment retrieval and emergency procurement.

D. Food and beverages from local off-site suppliers.

6.6.2 Ensure warehouse support is available in the OSC for spare parts retrieval, procurement and material management.

6.6.3 Function as the plant liaison with the Xcel Energy Communications department for the following activities:

A. Coordination of press interviews (if conducted) with plant management.

B. Rumor control.

C. Coordination of information for press releases.

6.6.4 Function as the liaison and primary on-site contact with off-site agencies (i.e., NRC Incident Response Team, INPO, etc.) for logistics matters such as:

A. Identification of local lodging (e.g., hotels, etc.).

B. On-site work space and communications arrangements.

C. Access to an interface with plant and corporate management personnel.

D. Identify location of procedures, drawing and other documents.

6.6.5 Coordinate (and make) requests for local off-site emergency response organization support including:

A. Fire Department

B. Ambulance and hospital

C. Local law enforcement agencies (LLEA).

NOTE: The Security Group is the primary contact for LLEA.

6.6.6 Coordinate procurement of off-site vendor services with the primary on-site contact and the EOF Logistics Coordinator including:

A. Contract Health Physics support (REC is primary contact).

B. General Electric Emergency Support Program (Engineering Group Leader is primary contact in accordance with A.2-210, (ENGINEERING SUPPORT IN THE TSC)).

C. Contract radwaste shipping services including shipment of post accident samples off-site for analysis.

D. Contract analytical laboratory services (Teledyne Inc.) for the analysis of environmental samples.

6.6.7 When the emergency is terminated, coordinate follow-up activities including:

A. Assist the Emergency Director in preparation of short and long term recovery actions to return the plant to an operational status (prior to recovery phase transition).

B. Collect, compile and retain all emergency records, logs, checklists, etc. for review.

C. If necessary, coordinate the following activities for the NRC:

1. Sequestering of plant components or systems until inspected.

2. Scheduling and conduct of personnel interviews.

6.7 TSC/BOSC Emergency Ventilation System (EVS) Operation

6.7.1 If the event involves radiological releases (Stack, Reactor Building Vent, HPV or unmonitored) to the environment, and if directed by the REC, shift the TSC emergency ventilation system to the emergency mode as follows:

NOTE 1: TSC-EVS Control Panel C-354 is located in the TSC HP Room.

NOTE 2: HS-9346 (V-AC-14 Remote Shutdown) is a toggle switch which controls the Second Admin Bldg Addition Ventilation Unit and is located in the 3rd floor Admin Bldg East H&V Room on the south wall on the side of the VAV SET POINT TRANSMITTER Panel (next to Panel LL-31).

CAUTION

If during activation or operation any trouble light illuminates (Yellow lights on TSC-EVS Control Panel C-354) return the NORM/EMERG switch to the NORM position and notify the Engineering Group Leader.

A. Verify EFT is in the High Radiation Mode by calling the Control Room.

B. Secure V-AC-14 by placing HS-9346 (V-AC-14 Remote Shutdown) in OFF.

C. Start V-FU-17 and V-EAC-17 by placing HS-4894 (Panel C-354) in EMERG.

D. Verify on Panel C-354 that lights VD-9300, VD-9301, VD-9335, and VD-9336 change from Red to Green.

E. Verify on Panel C-354 that lights VD-9261 and VD-9262 change from Green to Red.

6.7.2 During system operation periodically observe the system to confirm proper operation as follows:

A. At least every 8 hours check DPI-9320, the D/P manometer for TSC/BOSC envelop pressure, located in SW corner of TSC. Maintain D/P >0 in H_2O.

B. At least every 8 hours check DPI-9321, the D/P manometer for TSC/BOSC envelop pressure, located in NW closet of the TSC (Ops key 269). Maintain D/P >0 in H_2O.

6.7.3 Check and adjust TSC temperature as necessary to maintain room temperature. V-EAC-17 Temp Controller (TSC-9334) is located next to Panel C-354.

6.7.4 When the TSC/BOSC ventilation system is no longer required in the EMERG mode, shutdown V-FU-17 and V-EAC-17 by placing HS-4894 (Panel C-354), in NORM.

6.7.5 Restart V-AC-14 by placing HS-9346 (V-AC-14 Remote Shutdown) in ON.

6.8 TSC Support Group Instructions

6.8.1 Chronological Flipchart

A. The Chronological Flipchart Recorder should be stationed strategically in the TSC to facilitate the timely and accurate flow of information from key TSC personnel (e.g., ED, REC, EGL, etc.).

B. The Flipchart Recorder should monitor the dialogue in the TSC and record significant events and the times that they occur including:

1. Classification changes.

2. Changes in release rates.

3. Off-site protective actions recommended.

4. Report of missing persons, injuries or other related events.

C. As Flipchart sheets are filled they should be prominently posted in a designated location (hallway immediately outside the TSC).

6.8.2 Emergency Director Recorder (Narrative Log Keeper)

A. The Emergency Director Recorder should make all entries into the ED Log Book (or an equivalent log consisting of narrative log sheets which are numbered sequentially and bound in a three-ring binder).

B. The ED Recorder should be stationed immediately adjacent to the ED to facilitate the timely and accurate flow of information.

C. The ED Recorder should document all significant information and communications involving the Emergency Director (e.g., decisions made, strategies developed and messages communicated) in accordance with A.2-502.

D. The ED Recorder should periodically review the entries in the log with the Emergency Director to verify accuracy of the entries.

6.8.3 Document Control

A. The TSC Support Group member assigned to document control should be stationed near the Support Group Leader in the TSC.

B. TSC Document Control should receive completed, approved original documents and forms from various TSC personnel (Emergency Communicators, REC, etc.) when their immediate use is no longer required.

C. TSC Document Control should review the forms for completeness and file in an appropriate container provided for emergency records.

D. TSC Document Control should periodically inventory the blank forms in the TSC Controlled Forms file to ensure sufficient blank forms are available.

6.8.4 Form Duplicating and Distribution (copy machine operator)

A. The TSC support group member assigned form duplicating and distribution should be stationed near the Support Group Leader.

B. The copy machine operator should receive documents for printing (and distribution) from the Emergency Communicators, Support Group Leader or other TSC personnel.

C. The copy machine operator should obtain the rubber stamp indicating the distribution of duplicated forms (to personnel), stamp the original document, make the required number of copies and distribute as follows:

1. Prior to NRC Initial Site team arrival:

   a. Stamp the document with the TSC Copy Distribution Stamp only.

   b. Distribute in accordance with stamp instructions.

2. After NRC Initial Site Team arrival:

   a. Stamp the document with both TSC and NRC distribution stamps.

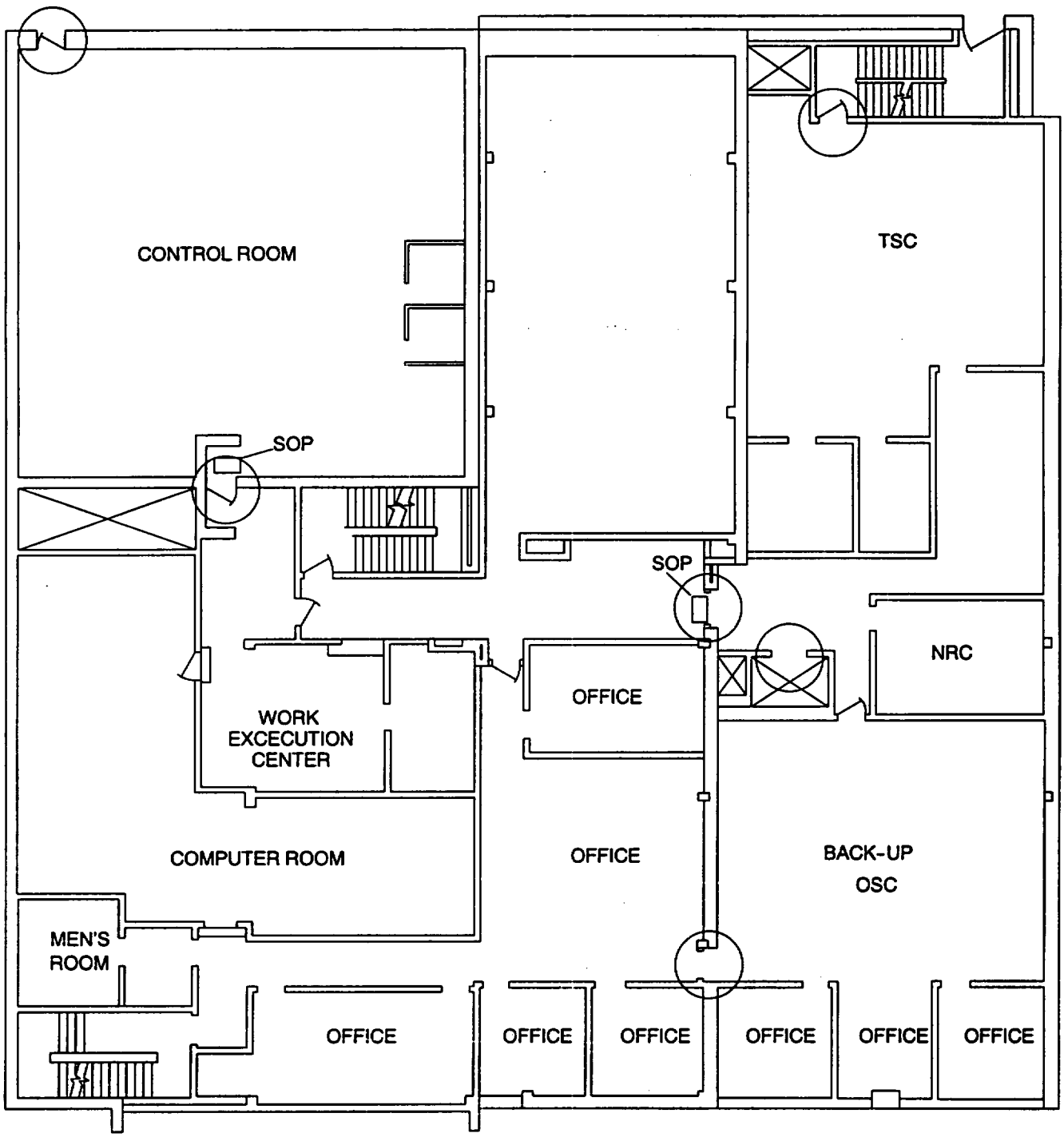
   b. Distribute in accordance with stamp instructions.

D. Upon completion of copying completed forms for distribution, the copy machine operator should forward the original document to TSC Document Control and inform the requestor that copying and distribution is complete.

7.0 FIGURES

FIGURE

7.1 EFT/EVS Boundary Floor Plan



A.2-106-1

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1.0 PURPOSE

This procedure provides instructions and guidance for activation and continued operation of the primary Operational Support Center (OSC) during a declared emergency (Alert or higher) at the MNGP.

Section 6.9 satisfies commitment M82031A and M85091A.

2.0 APPLICABILITY

2.1 An emergency classification (Alert or higher) has been declared at the Monticello Plant and,

2.2 The Emergency Director has ordered the Operational Support Center activated.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The OSC Coordinator is responsible for:

3.1.1 Overall coordination of activation and operation of the Operational Support Center.

3.1.2 Performance of personnel accountability for OSC personnel in the event of an evacuation.

$ 3.1.3 Selecting, assembling and dispatching OSC emergency teams as requested by the TSC and Control Room.

3.2 The Radiation Protection Coordinator (RPC) is responsible for:

3.2.1 Radiological monitoring and control in the OSC including habitability surveys.

3.2.2 Development and issuance of Emergency RWPs and radiological briefings of OSC emergency team members as directed by the OSC Coordinator.

3.2.3 Providing radiation protection support for OSC emergency teams, in-plant survey teams, on-site (out-of-plant) survey teams and off-site Field Teams.

3.3 The Chemistry Coordinator is responsible for:

3.3.1 Coordination of in-plant chemistry sampling and analysis activities.

3.3.2 Coordination of sample logging, identification and documentation.

3.4 Mechanical, Electrical and I&C Maintenance Supervisors are responsible for:

3.4.1 Selection, assembly and briefing of OSC emergency teams as directed by the OSC Coordinator.

3.5 Maintenance Engineering personnel are responsible for:

3.5.1 Technical support in the OSC including manning technical communications links with the TSC, maintaining status boards, OSC team coordination (via portable radios) and technical support to the OSC Coordinator.

3.6 Materials Engineering Support personnel are responsible for:

3.6.1 Warehouse and inventory control support in the OSC including spare/replacement parts identification and retrieval.

4.0 DISCUSSION

This procedure provides instructions for the activation, staffing and operation of the Operational Support Centers. The Primary OSC is located on the first floor of the Plant Administration building. This facility consist of a Command center (located in the Maintenance Supervisor's area) and a staging area for OSC teams (in the Plant Lunch Room). Plant drawings and technical reference materials are readily available in the area and adjacent maintenance offices.

The OSC is staffed by personnel from the Maintenance Group (e.g., mechanical, electrical and I&C), Radiation Protection, Chemistry, and Nuclear Plant Helper Groups. Initial staffing of key OSC positions is facilitated by the OSC ERO Tag Board located in the OSC Command Center. The tag board is designed to provide initial direction to OSC personnel in the initial (staffing) stages of an emergency when the OSC Coordinator may not be available (not yet staffed) to coordinate the various emergency response activities.

A backup (alternate) Operational Support Center is located on the second floor of the Plant Administration building. The backup OSC is located within the TSC Emergency Ventilation System boundary and would be activated and used in the event the Primary OSC becomes uninhabitable.

Instructions in this procedure apply to both the operation of the Primary OSC and the Back-up OSC unless noted otherwise.

5.0 PRECAUTIONS

5.1 Search and rescue of missing persons should take precedence over repair or corrective actions unless such actions are necessary to effect rescue or protect the immediate health and safety of the general public.

5.2 Emergency repair/re-entry team members should be selected from volunteers if the team mission involves high risk or exposure expected to be in excess of MNGP administrative or NRC limits.

6.0 INSTRUCTIONS

6.1 Initial Activation and Staffing

6.1.1 Upon notification of an emergency, refer to the OSC ERO Tagboard to determine initial OSC Coordinator assignment as follows:

A. If no one has assumed the OSC Coordinator position, turn the tag and sign-in as OSC Coordinator.

6.1.2 Establish residence at the OSC Command table (in the maintenance support area adjacent to the Lunchroom).

6.1.3 Initiate and complete Form 5790-107-06 (OSC COORDINATOR CHECKLIST) to support initial activation and staffing of the OSC.

NOTE: The fitness of individuals should be assessed prior to their engaging in safety-related emergency response activities. The fitness-for-duty assessment should include, at a minimum, a determination of whether individuals have consumed alcohol within the last five hours.

6.1.4 If FFD questioning is conducted (off-hours only), coordinate the disposition of individuals that indicate they are not fit-for-duty or that have consumed alcohol within the last five hours as follows:

A. Evaluate whether the individual is essential to the emergency response and the individual's ability to perform assigned functions.

B. Individuals considered essential to the emergency response should be immediately tested for BAC (i.e., breathalyzer) and:

1. Individuals whose test results are less than FFD guidelines (0.04% BAC) may engage in emergency response activities.

2. Individuals whose test results exceed FFD guidelines should be evaluated to determine if they are able to perform their duties and, if so, may be assigned emergency response duties under supervision.

C. Non-essential personnel may be directed to a waiting area (e.g., Lunchroom), sent home, or evacuated (if a Plant or Site evacuation is conducted). Personnel assigned to the next ERO shift should be directed in accordance with Section 6.2.

6.1.5 When the OSC is fully staffed, direct excess personnel as follows:

A. If in an Alert, personnel may return to their normal work duties (restricted to activities outside the Controlled Area depending on the event) or they may be instructed to standby in the Lunchroom (or Cold Machine Shop depending on habitability).

B. If a Plant (or Site) evacuation is imminent (i.e., in a Site Area or General Emergency) excess OSC personnel should be evacuated with other non-essential personnel. Prior to their departure from the Assembly Point (or site) 24-hour OSC staffing should be considered in accordance with Section 6.2.

6.1.6 Review Form 5790-107-06 for completeness and refer to Section 6.3 for continuing OSC operating instructions.

6.2 ERO Shift Scheduling

6.2.1 If the duration of the event could exceed 12-hours, evaluate the OSC staffing required to support 24-hour coverage.

6.2.2 If and when requested by the Maintenance Group Leader (or Support Group Leader), coordinate the assignment of ERO shifts for the OSC groups by assisting with the completion of Form 5790-106-07 (ERO SHIFT SCHEDULE - MAINTENANCE GROUP) and forwarding the completed schedule to the Maintenance Group Leader.

6.2.3 Coordinate the completion of ERO Shift Schedules for other groups (represented in the OSC) with their respective Group Leader in the TSC.

6.2.4 If 24-hour coverage is required, coordinate the departure of "next shift" OSC personnel as follows:

A. Ensure ERO personnel are informed of their next ERO shift in accordance with the ERO Shift Schedule.

B. Ensure personnel are instructed to contact the TSC if their final destination, after departing the site, is a location other than their permanent residence. In this case, they should provide a telephone number at which they can be reached if needed sooner than their next scheduled shift.

C. Ensure ERO personnel are instructed to carry their Company ID card to regain access to the site (in the event road blocks are established by off-site authorities).

6.2.5 Next shift ERO personnel should depart the site as follows (depending on the situation):

A. If no releases (above ODCM limits) are occurring and no off-site protective actions are in effect, personnel may depart the site as normal.

B. If significant releases are occurring or off-site protective actions are in effect or a Plant/Site evacuation is conducted, coordinate the departure of next shift ERO personnel with other evacuees and the county authorities (Sheriff Dispatcher or County EOC). The departure route should take personnel upwind of any releases.

6.3 Operation of the OSC

6.3.1 Ensure the OSC Coordinator telephone is continuously manned.

6.3.2 Ensure the OSC-TSC Plant Status Communicator link is manned and the OSC Plant Status board maintained in accordance with A.2-504 (EMERGENCY COMMUNICATOR DUTIES IN THE TSC AND OSC).

6.3.3 Ensure the OSC Emergency Work Status Communicator (OSC-TSC telephone) link and the OSC radio console are continuously manned and the OSC PERSONNEL AVAILABILITY and OSC TEAM TRACKING boards are maintained in accordance with A.2-504.

6.3.4 Provide periodic status updates in the OSC (Command Center and Lunchroom as applicable) in accordance with Section 6.4.

6.3.5 Provide periodic status updates to the Maintenance Group Leader in accordance with Section 6.4.

6.3.6 Process Form 5790-107-04 (EMERGENCY WORK REQUEST) and dispatch emergency teams from the OSC in accordance with Section 6.6 and A.2-206 (WORK CONTROL DURING EMERGENCIES).

6.3.7 Ensure OSC Radiation Protection personnel perform periodic habitability surveys in the OSC (Access Control, Security Building, Control Room, etc.) in accordance with Section 6.9 and:

A. Post the survey's results on the OSC Plant Status board.

B. Issue dosimetry to OSC personnel, (if necessary).

C. Establish contamination controls in the OSC (if necessary).

D. As applicable, recommend if/when relocation to the backup OSC is advisable (based on OSC habitability).

6.3.8 As necessary, monitor the SPDS/ERIS data to determine current plant conditions and radiation levels in accordance with Section 6.5.

6.3.9 If/when plant problems arise, evaluate the problem using the collective expertise in the OSC Command Center. Provide recommendations to the TSC via the Maintenance Group Leader.

6.3.10 As necessary, provide OSC personnel for OSC-TSC Task Groups as follows:

A. Task group assignments should be based on the requisite expertise for the particular problem.

B. Task groups may use the work area immediately outside the TSC or TSC NRC Conference Room (if not occupied by the NRC).

C. OSC task group member name tags should be relocated to the OSC TEAM TRACKING BOARD and the task group assigned a team number.

D. Upon completion of their assignment members of the task group may be used to brief OSC teams prior to being dispatched, they may participate on the OSC team itself, or dissolve back into the OSC staff.

6.3.11 If the duty Shift Manager (or Shift Supv) requests additional Operations personnel, dispatch the requested operators and relocate their name tag(s) on the OSC PERSONNEL AVAILABILITY board (to the assigned section).

6.3.12 If spare parts or materials are required, direct OSC personnel (the Support Group members familiar with purchasing, inventory control, and warehousing) to retrieve the spare parts or materials from the on-site warehouses.

6.3.13 If spare parts or materials are required that are not stocked in the on-site warehouse(s), forward the request to the EOF (EOF Coordinator) via the TSC.

6.3.14 As necessary, direct OSC Document Control to retrieve plant drawings, technical manuals or other pertinent documents for use in OSC team briefings or OSC-TSC Task Groups.

6.3.15 If conducting operations from the Primary OSC and habitability or other conditions dictate, request to relocate the OSC function to the backup OSC on 2nd floor of Admin Bldg. If/when directed, relocate the OSC in accordance with Section 6.13.

6.4 Status Update Instructions

6.4.1 The OSC Coordinator (or a designee) should conduct periodic status updates in the OSC (Command Center and Lunchroom as applicable) including the following topics:

A. Plant status including reactor condition (provided by the licensed operations member in the OSC).

B. Accident mitigation strategies (developed by the TSC) and the status of mitigation actions underway or planned.

C. Progress report of OSC teams presently dispatched.

D. On-site and off-site radioactive releases.

E. On-site and off-site protective actions taken (recommended to or implemented by off-site authorities).

F. OSC habitability and in-plant radiation conditions.

G. Status check of staffing in each functional group within the OSC (Electricians, I&C, RP, etc.)

6.4.2 The OSC Coordinator should provide (continuous) status updates to the Maintenance Group Leader which include the following topics:

A. The status of OSC emergency teams out in the field (in-plant).

B. The status of OSC teams ordered (by the TSC) but not yet dispatched.

C. The results of OSC teams that have completed their mission and returned to the OSC.

D. Any personnel injuries, overexposures or contaminations.

E. OSC staffing, habitability and other needs.

6.5 SPDS/ERIS Vax Instructions

6.5.1 Using a PC, log onto the MNGP Computer Network displaying the desktop screen. For access, logon using your current "User name" and "Password".

6.5.2 From the computer terminal desktop "Start" menu, initiate the "VAXes" application by choosing "Apps", "Kea 5.0", and "MT-Larry-PCS" or "MT-Moe-PCS" from the sequential drop down menus.

6.5.3 Respond to the USERNAME: prompt by typing HQEC and pressing RETURN.

6.5.4 Respond to the PASSWORD: prompt by typing HQEC and pressing RETURN.

6.5.5 Respond to the FILE NUMBER: prompt by entering the number of the desired display (1-29).

6.5.6 Review the data display for desired information. Ensure the status code (displayed on the right of the screen) is code 1 indicating the data is good. If not, the accuracy of the data is questionable.

6.5.7 To change display screens (select other data), enter CTRL Y and respond to the WOULD YOU LIKE TO SELECT ANOTHER FILE: prompt by entering Y and pressing RETURN.

6.5.8 To exit the system, enter CTRL Y and respond to the WOULD YOU LIKE TO SELECT ANOTHER FILE prompt by entering N and pressing RETURN.

6.6 Emergency Work Control and Search and Rescue

CAUTION

The process of selecting, briefing and preparing emergency teams should be followed for all emergency teams dispatched from the OSC. However, there are certain emergency tasks for which time may be a crucial factor (lifesaving, etc.). In these cases, team preparation should be expedited while ensuring the safety of team members is adequately protected.

6.6.1 When notified by the TSC of a task requiring an OSC emergency team:

A. Review the EMERGENCY WORK REQUEST form (if one was initiated for the work).

B. Obtain a brief description of the task, the work location and the priority code (1-3) which indicates the timeliness and relative importance of the task to other emergency work already identified.

C. Identify any qualifications or special skills required to perform the task.

6.6.2 Announce and briefly review the task in the OSC Command Center and determine:

A. The type of personnel to assign to the OSC team (e.g., electricians, mechanical maintenance, Rad Prot Tech (RPT), etc.) and personnel available by reviewing the OSC PERSONNEL AVAILABILITY board to identify potential team candidates.

B. The topics to be reviewed in the team pre-job briefing including precautions, tagouts, isolations, and special instructions.

6.6.3 Direct an OSC Maintenance Supervisor and RPC to select, assemble, brief and prepare the emergency team in accordance with Section 6.7.

6.6.4 Assign an emergency team number (the next team number in numerical sequence from the OSC TEAM TRACKING board) and direct the OSC TEAM TRACKING board be updated with the team number, task description and priority (1-3).

6.6.5 When the emergency team members have been assigned, direct the OSC TEAM TRACKING board be updated by moving team member name tags from the OSC AVAILABILITY board to the OSC TEAM TRACKING BOARD.

6.6.6 Complete the EMERGENCY WORK REQUEST form (if used) with the names of the emergency team members.

6.6.7 When the team is prepared, direct the OSC Team Communicator to establish and maintain radio contact with the team.

6.6.8 When the team is dispatched from the OSC, inform the Maintenance Group Leader. Direct the OSC Team Communicator(s) to update the TSC Emergency Work Status board keeper via 2-way link.

6.6.9 If problems are encountered by the emergency team, inform the TSC. Assist the TSC (and emergency team) in developing alternate methods, routes or other strategies to overcome any problems encountered. If necessary, recall the team to the OSC.

6.6.10 When teams return to the OSC, assign a Maintenance Supervisor and RPC to debrief the team (if necessary).

6.6.11 Ensure the OSC TEAM TRACKING and OSC PERSONNEL AVAILABILITY boards are updated upon return of the team.

6.6.12 Ensure the OSC Team Communicator updates the TSC Emergency Work Status board keeper via the 2-way link.

6.6.13 When briefed on the results of the emergency team mission, update the Maintenance Group Leader.

6.6.14 Retain Form 5790-107-04, Form 5790-107-02 (EMERGENCY RWP CHECKLIST) and Form 5790-401-01 (EMERGENCY EXPOSURE AUTHORIZATION FORM) and any other documents related to the emergency team mission. Submit the documents to the document control for retention as emergency records.

$ 6.7 <u>Emergency Team Selection, Briefing, and Preparation</u>

6.7.1 Select team members by referring to the OSC PERSONNEL AVAILABILITY board and in accordance with the following guidelines:

A. For fire-fighting activities select only Fire Brigade qualified personnel.

B. For operations activities (valving, etc.) select qualified Operators.

C. For search and rescue activities or tasks which involve mechanical, electrical or I&C expertise consider:

1. Soliciting volunteers if the task involves emergency exposures (refer to A.2-401 (EMERGENCY EXPOSURE CONTROL)).

2. Special skills, abilities or experience.

3. Individual's available exposure for tasks which are limited to exposures within MNGP administrative limits.

6.7.2 The Maintenance Supervisor assigned (and a RPT) should complete (if used) PART B of Form 5790-107-04.

NOTE: If protective anti-contamination clothing will be required, team members may suit-up during the pre-job briefing (to expedite team preparation).

6.7.3 The RPC should assign a RWP number to PART B of Form 5790-107-04 in accordance with the following criteria:

A. If current radiological conditions are normal (or near normal and the potential for significant change during the job is low), consider assigning the work to an existing Extended or Specific RWP (provided protective clothing and precautions specified on the existing RWP are adequate).

B. If radiological conditions are significantly elevated or there is high potential for changes in conditions during the job, assign the work to an existing Emergency Extended RWP (provided protective clothing and precautions specified on the existing Emergency Extended RWP are adequate).

C. If conditions are such that work cannot be assigned to an existing Extended, Specific, or Emergency Extended RWP, then initiate and complete Form 5790-107-02 in accordance with Section 6.12.

6.7.4 If emergency exposure(s) in excess of MNGP administrative limits are authorized for the task, the RPC assigned (or other RP personnel present) should initiate a Form 5790-401-01 for each team member in accordance with A.2-401.

6.7.5 The Maintenance Supervisor, emergency team members (or other OSC personnel) should obtain any reference or technical information (prints, drawings, etc.) to be reviewed during the pre-job briefing. The support group member (assigned to document control) should assist with print/drawing, technical manual retrieval as necessary.

6.7.6 The Maintenance Supervisor and RPC or RPT should conduct a pre-job briefing with the emergency team members as follows using Form 5790-107-09 (EMERGENCY TEAM BRIEFING/DEBRIEFING CHECKLIST).

A. The Maintenance Supervisor should review the completed Form 5790-107-04 issued for the job and:

1. Associated documents (e.g., prints, drawings, technical references, etc.).

2. The work location, work scope and the estimated time at the work site.

3. Any equipment isolation (valving or de-energizing) or jumper/bypass required to perform the work.

4. Any tools, equipment and/or spare parts that may be required to perform the job including type, size and coordination of obtaining tools or parts.

5. Special precautions or instructions that should be observed when performing the work.

B. The RPC or assigned RPT should review the completed Form 5790-107-02 or the existing Extended/Specific RWP if used including:

1. RPT in attendance requirements.

2. Existing or anticipated radiological conditions in the work area and travel routes.

3. Protective clothing and respirator equipment requirements (may be specified earlier to expedite team preparation). If respirators or SCBAs are required they should be obtained from Access Control.

4. Dosimetry and personnel monitoring requirements including back-out criteria (if used).

5. Designated travel routes and the plant exit point (if specified).

6. Any controlled keys required.

7. Emergency exposures authorized including reviewing Form 5790-401-01 and having team sign the form(s).

C. If necessary, the following technical reference materials should be reviewed during the pre-job briefing:

1. Plant drawings from the OSC Aperture Card file or Construction Drawing file (in the Work Execution Center (WEC) Office).

2. Applicable technical manuals.

3. The travel route and work sites on CEVUE.

6.7.7 If spare parts and/or tools are required, the Maintenance Supervisor should:

A. If spare parts (from the on-site warehouse) are required, direct the Material Specialist (warehouse personnel in the OSC) to coordinate the retrieval of the spare parts from the warehouse.

B. If tools are required (from the Cold Shop), dispatch OSC personnel (not team members) to obtain the necessary tools/equipment.

C. Direct the personnel obtaining tools and spare parts to deliver them to the OSC, Access Control, or another location convenient to the OSC team enroute to the work area.

6.7.8 During or immediately following the pre-job briefing, the emergency team members should don appropriate protective clothing specified on the RWP or Emergency RWP Checklist.

6.7.9 If respirators or SCBAs are required, the team members may obtain them at Access Control (after departing the OSC) or the required respirators may be brought to the OSC during team preparation.

6.7.10 Personal dosimetry, specified on the RWP, should be issued to the emergency team members by the RPT assigned (or another OSC RPT) as follows:

A. If electronic dosimeters are used, the team members should log-in at the RWP Sign-in station. A RPT (or Access Control RPT if one is not assigned to the team) should accompany the team to the RWP Sign-in station if manual setting of the electronic dosimeters dose and dose rate alarms is required.

B. If an electronic dosimeters reader (and dosimeters) are relocated to the OSC, log-in may occur in the OSC (prior to team departure) with a RPT manually setting the dose and dose rate alarms if required.

C. If Direct Reading Dosimeters (DRDs) are used, they should be issued to emergency team members in the OSC (prior to team departure). Dosimeters available in the OSC supply cabinet include 0-5R, 0-10R and 0-200R.

D. If DRDs are used (or electronic dosimetry is used in the manual mode), all individual exposure received by emergency team members should be recorded and tracked on Form 5790-107-08 (EMERGENCY TEAM LOG-IN). The form should be used to correct individual exposure files in the computer data base.

6.7.11 When prepared to depart the OSC, the emergency team should obtain a portable radio and establish radio contact with the OSC Team Communicator prior to departing the OSC.

6.7.12 If respirator protection equipment and/or electronic dosimeters are needed, the emergency team should proceed directly to Access Control after departing the OSC.

6.7.13 When the team is dispatched, the Maintenance Supervisor and RPC should inform the OSC Coordinator and await reassignment to prepare another emergency team.

6.7.14 When a team returns, debrief the team in accordance with PART II of Form 5790-107-09.

6.7.15 All completed forms (associated with an emergency team) should be assembled and the package delivered to the OSC Coordinator for retention as emergency records.

6.8 Evacuation and Personnel Accountability

6.8.1 When directed, perform personnel accountability in accordance with one of the following:

A. Using an Accountability Card reader (located at Access Control and the I&C Shop for the Primary OSC or the TSC for the Back-up OSC).

1. Direct each individual to insert his/her badge into the Accountability Card reader.

2. Using Form 5790-107-01 (EMERGENCY ACCOUNTABILITY SIGN-IN FORM), prepare a list of all personnel assigned to the OSC but not present during the accountability process (e.g., OSC emergency teams, etc.).

3. Using Form 5790-107-01, prepare a list of essential OSC Command Center personnel who will not be leaving the OSC Command Center to badge into the card reader.

B. If an Accountability Card reader is not operational:

1. Using Form 5790-107-01, prepare a list of all personnel present in the OSC and all personnel assigned to the OSC but not present during the accountability process (e.g., OSC emergency teams, etc.).

6.8.2 If the card reader method was used, inform the Security Group leader immediately upon completion of the card entry process.

6.8.3 Immediately forward the completed Form 5790-107-01 compiled in 6.8.1 to the Security Group Leader in the TSC.

6.8.4 Excess OSC personnel that were released to their work station or are in standby (in the Lunchroom or Cold Machine Shop) should evacuate with other non-essential personnel. Prior to their departure from the Assembly Point (or site) coordinate the assignment of next-shift personnel in accordance with Section 6.2.

6.8.5 Upon completion of the personnel accountability process, maintain continuous accountability of OSC personnel using the OSC PERSONNEL AVAILABILITY and OSC TEAM TRACKING boards. If more detailed accountability is desired, initiate Form 5790-106-10 (EMERGENCY RESPONSE FACILITY SIGN-IN/OUT LOG) for the OSC and update the log as personnel leave or enter the OSC.

NOTE: Prior to a Plant (or Site) Evacuation, continuous accountability of personnel assigned to the OSC (i.e., present and not present in the OSC) may be accomplished using the OSC TEAM TRACKING and OSC PERSONNEL AVAILABILITY boards.

6.9 Radiation Protection Coordinator Instructions

NOTE: The RPC work area in the Primary OSC may need to be rearranged (move cubicle partitions) to provide good interface with the OSC Coordinator and a portable radio obtained to allow the RPC to communicate with OSC dispatched teams.

6.9.1 Upon activation, the RPC and RPTs should refer to the OSC Tag Board for initial OSC assignments.

6.9.2 The RPC should obtain the RWP Books (including in-plant dose rate maps) from the RPC Office and report to the OSC Command Center.

6.9.3 Activate the Emergency RWPs (RWPs #900, 901, and 902).

6.9.4 Ensure the following activities are initiated (in accordance with tagboard instructions):

A. Verify four field team personnel (two surveyors and two drivers) are obtaining vehicle keys and are initiating out-of-plant surveys in accordance with A.2-410 (OUT-OF-PLANT SURVEYS).

B. If radiological conditions are a concern, verify habitability surveys are initiated in the OSC, TSC, Control Room, Access Control, and Security Building. Ensure survey results are posted on applicable facility status boards.

C. Ensure one RPT is available for assistance at the on-site Assembly Point.

D. Ensure one RPT is available to man Main Access Control.

E. Ensure several RPTs are available to support OSC teams and pre-job briefings.

F. If conducting operations from the Primary OSC, ensure the protective clothing cabinet in the Lunchroom is unlocked.

6.9.5 If operating from the Primary OSC, perform the following:

A. Relocate and activate the OSC Continuous Air Monitor (CAM) in the first floor hallway at the top of the stairway to Access Control. (CAM is stored in a cabinet by the vending machines.)

B. Locate and activate the OSC Dosimeter Area Radiation Monitor (DARM) in the OSC (Lunchroom).

6.9.6 If operating from the Back-up OSC, perform the following:

A. Ensure the TSC Continuous Air Monitor (CAM) is setup and activated in the hallway by elevator.

B. Locate, preferably by east windows, and activate the OSC Dosimeter Area Radiation Monitor (DARM) in the back-up OSC.

6.9.7 If desired, relocate an Electronic Dosimeter Reader and a rack of Electronic Dosimeters to the OSC.

6.9.8 Provide one (or more if required) RPTs to man Main Access Control to assist emergency teams with respirator or SCBA issuance and log-in.

6.9.9 Respond to TSC (REC or MSL) requests for in-plant surveys and out-of-plant surveys by dispatching RPTs from the OSC. Ensure RPTs dispatched are tracked (as an OSC team) on the OSC TEAM TRACKING board.

6.9.10 Assist with emergency team selection, briefing, and preparation in accordance with Section 6.7.

6.9.11 Continuously monitor in-plant radiation levels on SPDS/ERIS using the instructions in Section 6.5. If ARM readings are not available via SPDS use Form 5790-107-03 (EMERGENCY ARM LOG) and obtain readings from the Control Room.

6.9.12 Maintain periodic contact with the RPTs that are manning Main Access Control. Provide periodic relief for them and consider the use of protective clothing or relocating Access Control to the OSC as radiological conditions warrant.

6.9.13 Maintain communications with the REC (and/or MSL) in the TSC.

6.9.14 If the REC and/or ED determine conditions exist that require dosimetry, issue dosimetry to all OSC personnel in accordance with Section 6.11.

6.9.15 If radiological conditions warrant, recommend to the OSC Coordinator to establish strict contamination control measures in the OSC or relocate the Primary OSC to the Back-up OSC as applicable.

6.10 Chemistry Coordinator Instructions

6.10.1 Upon activation, all Chemistry Coordinators should refer to the OSC Tag Board for initial Chemistry Coordinator assignment.

6.10.2 Obtain any necessary administrative suppliers from the OSC File Cabinet or Access Control.

6.10.3 Monitor Chemistry group augmentation and initial assignments and ensure Chemistry personnel are assigned to perform the following emergency response functions (in accordance with OSC Tag Board assignments):

A. TSC MIDAS Operator.

B. Set-up and preparation of the Plant Count Room.

C. Set-up and preparation of the Chemistry Lab.

6.10.4 Ensure Chemistry Technicians (CTs) are dispatched to the EOF to perform the following functions (in accordance with OSC Tag Board assignment). Coordinate these assignments with the REC (in the TSC) and RPSS (in the EOF):

A. EOF Count Room CT.

B. EOF MIDAS Operator.

6.10.5 Consider relocating the Chemistry Coordinator function to the Chemistry Lab (Access Control). Determination should be based primarily on habitability conditions and coordinated with the RPC and OSC Coordinator.

6.10.6 If the Chemistry Coordinator function is relocated to the Chemistry Lab, establish residence in the Chemistry Lab. Notify the Chemistry Section Leader of your relocation to the Chemistry Lab.

6.10.7 Implement the applicable section of A.2-108 (ACCESS CONTROL DURING EMERGENCIES) for Chemistry Lab set-up and operation instructions. (A copy of the procedure is included in the PASS Procedures Manual at Access Control.)

6.10.8 Maintain communication with the OSC Coordinator and RPC (in the OSC) and the Access Control RPT.

NOTE: Chemistry personnel dispatched (from the lab) for sampling activities should be identified, assigned a team number, tracked and coordinated by the OSC via radio (talk group 5d).

6.10.9 Notify the OSC Coordinator (and/or RPC) prior to dispatching any (and all) Chemistry personnel for chemistry sampling (e.g., to the Stack or in-plant areas).

6.10.10 Coordinate in-plant chemistry sampling activities and sample analysis (in the Chemistry Lab) in accordance with A.2-408 (SAMPLE COORDINATION DURING EMERGENCIES) and as directed by the Chemistry Section Leader or REC.

6.10.11 If habitability conditions in the Chemistry Lab dictate (or as directed by the OSC Coordinator) relocate the Chemistry Coordinator function back to the OSC.

6.11 OSC Habitability and Personnel Monitoring

6.11.1 The RPC should coordinate the conduct of periodic habitability surveys including smears, dose rates and air samples (particulate, iodine, etc.) as directed by the REC (or MSL) in the following areas:

A. OSC Command Center and Lunchroom areas as appropriate.

B. Access Control.

C. TSC (including the NRC Conference Room and other areas within the EVS envelope).

D. Control Room and Work Execution Center.

E. Security Building.

F. If radiological conditions dictate, areas within the EFT envelope.

6.11.2 Habitability survey results should be reported to the RPC and REC. Results should also be posted on the status board in the respective facilities.

6.11.3 If a Site Area Emergency is declared or a plant (or site) evacuation is conducted due to radiological exposure concerns, the RPC (as directed by the REC) should ensure 0-5R dosimeters (DRDs) or electronic dosimeters are issued to all OSC personnel as follows:

A. DRD Issuances:

1. Obtain the dosimeters and sufficient copies of Form 5790-201-02 (DOSIMETRY ISSUANCE LOG) from the OSC storage cabinet.

2. Verify all OSC personnel have a TLD and rezero (if necessary) and issue one 0-5R dosimeter to each person in the OSC (and Lunchroom).

3. Log the dosimetry issuance information on the Dosimetry Issuance Log.

4. When dosimetry issuance is complete (to all OSC personnel), retain the dosimetry issuance log(s).

5. If necessary, log, rezero and reissue dosimeters when individual dosimeters reach 3/4 scale (4 rem).

B. Electronic Dosimeters Issuance:

1. Instruct all OSC personnel to obtain an electronic dosimeter (either available at Access Control or the OSC) and log in using an Emergency Extend RWP.

C. Ensure all personnel reporting to the OSC (after the dosimetry issuance process) have a 0-5R dosimeter or electronic dosimeter and TLD.

6.11.4 If smearable contamination levels in the OSC (Command Center) or personnel staging areas exceed 1000 dpm/100 Cm^2, consider establishing strict contamination control measures in the OSC area by:

A. Designating one OSC exit/entrance point (preferably the Lunchroom entrance for the Primary OSC and the doorway by the elevator for the Back-up OSC) and establishing a Step-Off-pad (and frisking station) at that location.

B. Ensure all OSC personnel frisk before entering the OSC.

C. Conduct followup surveys in the OSC and initiate decontamination (if feasible).

D. Control eating and drinking in the OSC until all foodstuffs and surfaces are surveyed for contamination.

E. Consider protective clothing use (paper coveralls or inneralls) for OSC personnel use.

6.11.5 If operating from the Primary OSC and radiological conditions warrant, consider relocating the OSC function (both work control and radiation protection) to the backup OSC. Inform the Maintenance Group Leader, REC and ED.

6.12 Emergency RWP Instructions

6.12.1 The RPC should initiate Form 5790-107-02 for all emergency tasks requiring an OSC team that cannot be assigned to an existing Specific or Extended RWP.

6.12.2 Review Form 5790-107-04 or the WO issued for the job (if either are used) to determine the job scope and work location.

6.12.3 The RPC should complete page 1 of Form 5790-107-02 as follows :

A. Indicate whether a RPT should be in attendance on the job (assigned to the OSC Team).

B. Determine if emergency exposures (in excess of MNGP administrative or NRC limits) are authorized. If so, initiate Form 5790-401-01 for each team member authorized emergency exposure.

C. Indicate the recommended travel route based on existing or expected radiological conditions and the highest anticipated travel route dose rate.

D. Indicate the designated plant exit point for the team (e.g., Access Control, Radwaste, etc.)

6.12.4 The RPC or RPT should complete page 2 of Form 5790-107-02 as follows:

A. Determine the electronic dosimetry alarm setpoints as follows:

1. The electronic dosimeter dose alarm setpoint should be set at the lowest available dose of the team members (i.e., the available dose of the team member with the lowest dose for the job should be assigned to all team members as the authorized dose and the electronic dosimeter set at that limiting dose).

2. Determine the electronic dosimeter dose rate alarm setpoint by taking the electronic dosimeters dose alarm setpoint divided by the expected time (in hours) at the work area.

3. Compare the expected work area dose rate to the electronic dosimeter dose rate alarm setpoint determined above.

4. IF the electronic dosimeter dose rate alarm setpoint is lower than the expected work area dose rates,
THEN the job should not be performed until additional job planning is completed and approved by the REC.

B. Determine the travel route backout dose rate by using 3 times the highest expected travel route dose rate.

C. Determine if any Rad Prot keys are required based on the recommended travel route (indicated by the RPC on page 1).

D. Determine the required protective clothing, respiratory protection and dosimetry for the job and indicate the requirements on the Emergency RWP Checklist.

E. Sign, date and time the completed Emergency RWP Checklist.

6.12.5 Retain the EMERGENCY RWP CHECKLIST in the OSC and record the final dosimetry information upon completion of the job.

6.12.6 Forward the completed form to OSC Document control for retention as emergency records.

6.13 Transfer to the Backup (alternate) OSC

6.13.1 If radiological conditions or other circumstance dictate, consider relocating the OSC to the backup OSC.

6.13.2 Contact the Maintenance Group Leader (or Emergency Director) to discuss the transfer to the backup OSC.

6.13.3 When directed, relocate the OSC function to the backup OSC in accordance with A.2-109 (ACTIVATION AND OPERATION OF THE BACKUP OSC).

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1.0 PURPOSE

This procedure outlines the duties and responsibilities of the Emergency Director and provides instructions and guidance for the conduct of Emergency Director activities in the Technical Support Center during a declared emergency at the Monticello Nuclear Generating Plant.

Sections of this procedure, which satisfy commitments M76060A and M90125A, are marked with a $.

2.0 APPLICABILITY

2.1 An emergency (Alert or higher classification) has been declared at the Monticello Nuclear Plant and the TSC is activated.

2.2 A designated Emergency Director has received a turnover from the Duty Shift Manager (Interim Emergency Director) and assumed the duties and responsibilities of Emergency Director.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Emergency Director is responsible for:

3.1.1 Implementation of this procedure and management of emergency response activities in the TSC.

3.1.2 Overall direction and coordination of MNGP's emergency response activities. (Prior to turnover of this responsibility to the Emergency Manager.)

3.1.3 Off-site communications with State and Local authorities and federal agencies (before turnover to the EOF).

3.1.4 Notification of new emergency classifications (prior to turnover of this responsibility to the Emergency Manager). The Emergency Director retains primary responsibility to classify or re-classify emergencies.

3.1.5 Making off-site Protective Action Recommendations (PARs) to State and/or County authorities (prior to turnover of this responsibility to the Emergency Manager).

4.0 DISCUSSION

This procedure provides instructions for the various duties and responsibilities of the Emergency Director in the Monticello TSC. In some cases, this procedure references other procedures which provide more detailed instructions for the performance and coordination of Emergency Director tasks (e.g., Event Termination/Recovery).

The instructions contained within each section of this procedure are presently in the "most probable" sequential order and, although presented in this sequence, they are intended to be implemented as the emergency situation dictates and as determined by the Emergency Director.

During the implementation of this procedure the Emergency Director must consider the three distinct phases in the Emergency Classification, Declaration and Notification process.

Classification: The act of **assessing** the EALs to determine the appropriate classification which the ongoing events are categorized. This may take a reasonable length of time (5 to 15 minutes for most situations) depending upon the complexity of the situation. This 15 minute assessment period is consistent with the NRC Branch Position on Timeliness of Classification of Emergency Conditions, EPPOS No. 2.

Declaration: The act of formally **declaring** the classification based on the assessment of EALs. This is the point at which the classification time is set and the 10CFR50, App. E 15 minute off-site notification clock starts.

Notification: The act of **making the notification(s)** to the State, Wright and Sherburne Counties, NRC, etc.

5.0 PRECAUTIONS

5.1 When transferring off-site responsibilities from the TSC to the EOF, the various functions should be transferred simultaneously due to their inter-dependence (i.e., transferred as a package, at the same time, and not independently).

5.2 Emergency classification changes and Off-site Protective Action Recommendations (when made) ***SHALL*** be transmitted to the State and Counties within 15 minutes.

6.0 INSTRUCTIONS

6.1 Response to an Unusual Event

$ 6.1.1 When contacted by the Duty SEC, obtain a general description of the event including the following information (if applicable):

A. The cause of the event and immediate corrective actions taken.

B. Plant status before (and after) the event occurred (e.g., operating, shutdown, reduced power, etc.).

C. On-site personnel status (e.g., injuries, contaminations, over exposures).

D. If the event involves any radioactive releases above allowable limits.

E. Status of off-site notifications to State, Counties, NRC and whether the event warrants additional individual/organization notifications in accordance with 4 AWI-04.08.01 (EVENT NOTIFICATIONS).

6.1.2 The SEC will ask if (precautionary) notification of a Radiological Emergency Coordinator (REC) is necessary. Instruct the SEC to contact a REC if (in your opinion) the event involves or has significant potential to involve off-normal radiological consequences. The duty Shift Manager or Control Room Supervisor may be consulted to make this determination.

6.1.3 If located at the plant, consider responding to the Control Room, Work Execution Center Office or TSC (if warranted). If located off-site, provide the Duty SEC with the telephone (or pager) number at which you can be contacted (if you will not be reporting to the Plant).

NOTE: There is no requirement that the Emergency Director report to the Plant during a NUE

6.1.4 Maintain a heightened state of awareness throughout the event. If conditions degrade, respond accordingly. If the emergency classification escalates (to Alert or higher), refer to Section 6.2 of this procedure.

6.2 Response to an Alert (or higher)

6.2.1 Upon receipt of the Alert declaration (via PA announcement or pager activation) all designated Emergency Directors should report immediately to the TSC.

6.2.2 Upon arrival, refer to the TSC ERO Tag Board and determine the initial Emergency Director assignment as follows:

A. If no one has assumed the ED position turn the ED tag and sign-in as Emergency Director.

B. If the Plant Manager is present, he/she should assume the duties of Emergency Director.

C. If the Plant Manager is not present, another qualified, designated Emergency Director should assume the duties until relieved by the Plant Manager.

D. Read the ED task tag and turn it over, and sign-in to indicate the ED position is filled.

6.2.3 Report to the Control Room for the most recent update of plant status and the turnover of Emergency Director responsibilities from the Duty Shift Manager.

A. Upon assumption of Emergency Director duties, remain in the Control Room until the TSC reaches minimum staffing levels as identified in A.2-106 (ACTIVATION AND OPERATION OF THE TSC).

B. Contact the TSC to determine if the following personnel are available in the TSC to meet minimum staffing criteria.

1. REC
2. Lead SEC or EC
3. Mechanical Engineer
4. Electrical Engineer
5. Nuclear Engineer

6.2.4 Report to the TSC when minimum staffing levels have been met.

6.3 <u>ED Activation and Staffing in the TSC</u>

6.3.1 Initiate Form 5790-213-01 (EMERGENCY DIRECTOR ACTIVATION CHECKLIST).

6.3.2 If necessary, establish contact with the Control Room (Shift Manager or Communicator) to determine any changes in plant status and emergency response actions in-progress. The Operations Group Leader (when staffed) will assume this duty.

6.3.3 Ensure the following key TSC emergency positions are being staffed (by qualified personnel). If any of the positions remain unfilled (after about 30 minutes) direct the Lead Emergency Communicator (EC) to contact qualified personnel (refer to 5970-001-01 (EMERGENCY RESPONSE ORGANIZATION) to identify qualified candidates and the Monticello and Prairie Island Nuclear Emergency Telephone Directory for home/office/pager telephone numbers):

A. Support Group Leader

B. Operations Group Leader (OGL)

C. Radiological Emergency Coordinator (REC)

D. Engineering Group Leader (EGL)

E. Maintenance Group Leader (MGL)

F. Security Group Leader (SGL)

6.3.4 As TSC staffing progresses, begin assessing the event using available information from the following sources:

A. Periodic discussions with the TSC Group Leaders.

B. Review of completed EMERGENCY NOTIFICATION FOLLOW-UP MESSAGE FORM(S), and OFF-SITE PROTECTIVE ACTION RECOMMENDATION FORM(S) generated by the REC (or transmitted from the EOF after off-site communications is turned-over).

C. Review of critical plant parameters, plant process monitor and in-plant radiological data from SPDS.

D. (CR-TSC-OSC-EOF) Technical Communicator link information being posted on Operation Status Board.

E. TSC/EOF counterpart communications (e.g. REC/RPSS, Engineering Group Leader/Tech Support Supervisor, etc.) when the positions are staffed.

6.3.5 Continuously, during the course of the emergency, perform the duties of Emergency Director in accordance with the applicable section(s) of this procedure.

6.4 Emergency Director Record-keeping

6.4.1 Upon activation initiate the Emergency Director Log book.

6.4.2 When TSC Support Group staff are available, designate (or have the Support Group Leader assign) an individual to perform the duties of Emergency Director Recorder (ED Recorder) and maintain the Emergency Director Log. When staffed, the ED recorder should be positioned near the Emergency Director to facilitate the flow of information in a timely and accurate fashion.

6.4.3 Record significant events and make other entries into the Emergency Director Log in accordance with the following criteria:

A. Significant events and the time(s) which they occur including changes in plant conditions, radiological releases, and adverse plant parameter trends.

B. The general context of reports made to the Emergency Director and/or discussions (in-person and telephone) between the ED and other personnel (including the NRC, if present).

C. Emergency notifications (e.g. Classification changes, Off-site Protective Action Recommendations) and the time(s) the notification forms were approved.

D. Summarize major decisions made by the Emergency Director including the time the decision was communicated and its basis.

6.4.4 Periodically monitor the distribution of completed, approved forms in the TSC (specifically to the ED and NRC) to ensure prompt dissemination of information (forms control and distribution is the responsibility of the Support Group Leader).

6.4.5 Ensure all completed forms are filed in the appropriate container provided and retained as emergency records.

6.5 Transfer of Off-site Responsibilities

CAUTION

When transferring off-site responsibilities from the TSC to the EOF, the various functions should be transferred simultaneously due to their inter-dependence (i.e., transferred as a package, at the same time, and not independently).

6.5.1 When the EOF is operational consider transfer of the following responsibilities from the TSC to the EOF:

A. Performance of off-site dose projection (MIDAS) activities.

B. Coordination of off-site radiological monitoring teams (including the Field Teams and Sample Couriers) for the purpose of MIDAS results comparison and validation.

C. Off-site communications including the issuance and transmittal of the following emergency forms:

1. EMERGENCY NOTIFICATION REPORT FORMS (for re-classification of the emergency and PARs at a General Emergency).

2. EMERGENCY NOTIFICATION FOLLOW-UP MESSAGES (generated by MIDAS and issued periodically to the State Emergency Operations Center (EOC) Planning and Assessment Center (PAC)).

3. OFF-SITE PROTECTIVE ACTION RECOMMENDATION CHECKLISTS (for off-site protective action recommendations based on projected dose).

D. Responsibility for emergency class declaration and notification. (The Control Room and Emergency Director retain the primary responsibility for re-classification and make recommendations to the Emergency Manager who has the responsibility to declare the new emergency class.)

6.5.2 Consult with the Emergency Manager regarding the transfer of off-site responsibilities. Suggest the Emergency Manager consult with the Radiation Protection Support Supervisor (RPSS) regarding the transfer.

6.5.3 Consult with the Radiological Emergency Coordinator (REC) and direct the REC to confer with the RPSS on the proposed transfer.

NOTE: If possible, the transfer should be conducted when no off-site communications are being processed by the TSC (e.g. Follow-up Messages, etc.)

6.5.4 Direct the Lead EC and REC to prepare to transfer responsibility for off-site communications to the EOF.

6.5.5 When all parties are prepared, transfer responsibility for off-site communications (and other off-site related activities outlined in 6.5.1) and make an announcement to that effect in the TSC.

6.5.6 Confirm successful completion of the transfer with the REC and Lead EC.

6.5.7 Direct the ED Recorder to record the transfer of off-site responsibilities to the EOF in the ED Log.

6.5.8 In the event of an EOF evacuation or if other circumstances dictate, transfer the responsibility for off-site communications (specified in 6.5.1) back to the TSC by reversing the transfer process outlined in this section.

6.5.9 If (due to EOF evacuation or other circumstances) the responsibilities for off-site communication are transferred back to the TSC:

A. Direct the Lead EC to immediately contact the appropriate State and County authorities and inform them that the TSC has assumed responsibility for off-site communications.

B. Upon completion of the transfer, consider conducting a briefing in the TSC which includes a status report in the following areas:

1. MIDAS operational status including the latest dose projection results.

2. Off-site Monitoring team status including locations and recent survey results.

3. Estimate of when the next EMERGENCY NOTIFICATION FOLLOW-UP MESSAGE will be prepared for review (first follow-up transmission from the TSC).

4. Status of notifying the State and counties of the transfer of off-site responsibilities.

5. The status of State and County EOC activations (i.e., which EOCs are staffed and operational and which are not).

6. Communications equipment operational status including the status of any transmissions currently in progress.

C. Review, approve and issue the various forms used for off-site emergency communications in accordance with the applicable section of this procedure.

6.6 TSC Status Updates and ED Briefings

6.6.1 During initial TSC activation and staffing, make periodic status announcements in the TSC which include:

A. The current emergency classification.

B. A narrative summary of the event (when known) including emergency response actions underway or planned and the present status of the reactor.

C. The status of any on-site or off-site protective actions taken or initiated (e.g., plant evacuation, etc.)

D. The Fitness-for-Duty verification of personnel responding to the TSC (during off-hours activation only).

6.6.2 Announce significant events in the TSC as they occur (versus waiting for a formal status update). For important events, such as significant increases in radiological release rates, etc. ensure all personnel in the TSC are aware of the occurrence.

6.6.3 During routine TSC operation, conduct periodic status updates (about every 30 minutes) as follows:

A. Prior to the update, make an announcement in the TSC that an update will be conducted in 1-5 minutes. This will allow key TSC personnel time to prepare their input.

B. Initiate Form 5790-213-02 (EMERGENCY DIRECTOR STATUS UPDATE CHECKLIST). Record the date and time of the status update on the form.

C. Announce the beginning of the update in the TSC and request personnel keep background noise (in the TSC) to a minimum during the entire update.

D. Using Form 5790-213-02 (as a guide) conduct the update.

E. As personnel provide status reports in their respective area(s) note significant items and ask questions to ensure the current status is understood (Form 5790-213-02 may be used for notes).

F. If the NRC is present (in the TSC) they should provide their status reports (in each functional area) immediately after their MNGP counterpart.

G. Upon completion of the status update announce the estimated time of the next scheduled update in the TSC.

H. Direct the ED Recorder to note the update in the Emergency Director Log and retain the completed EMERGENCY DIRECTOR STATUS UPDATE CHECKLIST as emergency records.

6.6.4 Upon completion of TSC status update(s) contact the Emergency Manager in the EOF command center and provide a status report (with current information obtained during the TSC update).

6.6.5 Ensure the TSC Group Leaders update their personnel (e.g. OSC, Control Room, Access Control, etc.) with current information obtained during the TSC status update.

6.6.6 Direct the Lead Emergency Communicator to conduct periodic general status announcements in the Plant, and Site Administration Building via the PA system. The announcements should include the following information (if applicable):

A. The current emergency classification and status of the plant (reactor).

B. The extent of any off-site radiological releases and status of on-site and off-site protective actions taken.

C. The habitability of the occupied areas including general area dose rates (if applicable).

6.6.7 If the need arises for private conference(s) outside the TSC (e.g., with NRC officials, ED turnover briefings, etc.) the NRC Conference Room (immediately outside the Command Center) or the Back-up OSC may be used if not occupied.

6.7 TSC Operations

$ 6.7.1 If off-site agencies or organizations respond to the TSC (e.g., NRC, State Health Department, etc.) direct the Support Group Leader to serve as the liaison for these organizations.

$ 6.7.2 Serve as the utility "point-of contact" for senior off-site officials present in the TSC (e.g., NRC Director of Site Operations, Site Team Leader, etc.) and:

A. Include the officials in TSC Status Updates, Emergency Director briefings, discussions and ED turnover activities.

B. Confer with the officials on formulation of off-site protective action recommendations (if the EOF has not assumed this responsibility).

C. Ensure the officials receive copies of completed forms and transmittals distributed in the TSC.

6.7.3 If radiological controls and/or protective actions are required in the TSC (e.g., transfer of TSC access, use of PCs, etc.) ensure the necessary actions are initiated in accordance with the applicable section(s) of this procedure.

6.7.4 Conduct periodic status updates in the TSC throughout the emergency in accordance with Section 6.6 of this procedure.

6.7.5 When the criteria for event termination or recovery are met direct the Support Group Leader to coordinate compiling the short-term and long-term recovery action lists developed by the TSC Group Leaders.

6.8 Technical Assessment

6.8.1 Direct the Engineering Group Leader to perform engineering and operational assessments of the event in accordance with EPIP A.2-210 (ENGINEERING SUPPORT IN THE TSC) and:

A. Continuously monitor critical plant parameters and indications (using SPDS and Technical Communicator link).

B. Continuously man the EOF-OSC-TSC-CR Technical communications link and maintain the Operational Status Board in the TSC.

C. Trend selected plant parameters critical to the event to determine adverse trends and predict (or anticipate) plant transients or potential releases (e.g., containment pressure, etc.)

D. Evaluate the engineering and operational aspects of the event including the assessment of inoperable components and/or systems critical to accident mitigation and the determination of alternative methods or corrective actions to restore those capabilities.

6.8.2 Direct the Engineering Support Group to serve as the liaison (or primary contact) with off-site engineering and technical vendors and services required by the TSC (e.g. General Electric Emergency Support, A/E vendor, etc.) until the EOF is activated.

6.8.3 If 24 hour staffing is required, direct the Engineering Group Leader to coordinate the establishment of a ERO shift schedule for the TSC Engineering Staff with the Support Group Leader.

6.8.4 Direct the Engineering Staff to continuously compare plant parameters, indications, events and trends with the Emergency Action Levels (EALs) contained in EPIP A.2-101 (CLASSIFICATION OF EMERGENCIES) and to make recommendations on classification changes immediately upon verification of indications.

6.8.5 Ensure the TSC Engineering Staff continuously mans the Emergency Notification System (ENS) link with NRC Headquarters (when required) and provides technical and operational information to the NRC as requested.

6.8.6 Direct the Engineering Group Leader to provide a status report on engineering and operational assessment during TSC status updates.

6.8.7 Direct the Engineering Group Leader to coordinate providing technical support to the TSC for the evaluation of inoperable systems or components, related to accomplishing accident mitigation objectives, and the determination of alternate methods to accomplish those objectives.

6.8.8 Ensure the Engineering Staff maintains a list of inoperable components, systems and/or facility damage identified throughout the event. When the criteria for event termination (or recovery) are met, direct the Engineering Group Leader to coordinate the development of short-term and long-term recovery item lists identifying those tasks required to return the plant (and/or immediate site) to a pre-accident state.

6.8.9 If applicable, ensure the TSC Engineering Staff and the Operations Group Leader follows the implementation of the EOPs (by the Control Room) to predict significant operational evolutions (e.g., containment venting) and verify proper EOP implementation.

6.8.10 If the Control Room indicates that Severe Accident Management Guidelines (SAMGs) have been entered, take the following steps:

A. Direct the Operations Group Leader to assume the SAMG Decision Maker responsibilities.

B. Direct qualified personnel to assume their SAMG Evaluator responsibilities.

C. Ensure that SAMG Implementors (Control Room and OSC personnel) carry out their duties as directed by the Operations Group Leader.

D. Announce the transition to the Severe Accident Management Guidelines in the TSC and ensure that the EOF is made aware of the transition.

E. Monitor the activities of the SAMG Group and provide management support and/or assistance as requested.

6.9 Radiological Assessment

6.9.1 Direct the Radiological Emergency Coordinator (REC) to coordinate the activities of the Radiation Protection staff including:

A. The coordination of RP Group staffing and emergency response activities in accordance with EPIP A.2-209 (RESPONSIBILITIES OF RADIOLOGICAL EMERGENCY COORDINATOR).

B. Radiological accident assessment including the coordination of off-site dose projections, dose assessment and the formulation of off-site Protective Action Recommendations in accordance with EPIP A.2-204 (OFF-SITE PROTECTIVE ACTION RECOMMENDATIONS).

C. Radiological habitability monitoring and control in the Plant including the formulation of protective action recommendations for Plant personnel in accordance with EPIP A.2-201 (ON-SITE PROTECTIVE ACTION).

6.9.2 Ensure the REC implements radiological monitoring and controls at the plant. Refer to Section 6.13 for Emergency Director instructions regarding:

A. Radiological monitoring and control at the Plant.

B. Establishment of Control Room EFT and TSC Emergency Ventilation System Boundaries.

C. Plant habitability and protective actions for ERO personnel.

D. Emergency exposure authorizations for ERO personnel.

6.9.3 Ensure the Radiation Protection Group continuously performs off-site dose projections throughout the event and formulates off-site protective action recommendations (as necessary). Refer to Section 6.12 of this procedure for Emergency Director instructions regarding the formulation and issuance of off-site protective action recommendations.

6.9.4 If 24 hour staffing is required, direct the REC to coordinate the establishment of a ERO shift schedule for the Plant Radiation Protection Group with the Support Group Leader.

6.9.5 Direct the Radiation Protection Group to continuously monitor and compare actual (and potential) radiological releases (e.g. release rate, etc.) indications, events and trends with the Emergency Action Levels (EALs) contained in EPIP A.2-101 and to make recommendations on classification changes based on radiological conditions.

6.9.6 Direct the REC Assistant to continuously update the Radiological Status Board in the TSC using data from approved Emergency Notification Follow-up Messages and other appropriate sources.

6.9.7 Direct the REC to provide a status report on radiological assessment, meteorological conditions and plant habitability during TSC status updates.

6.9.8 When the REC submits Form 5790-102-03 (EMERGENCY NOTIFICATION FOLLOW-UP MESSAGE) for approval, process the form in accordance with Section 6.10 of this procedure.

6.9.9 If making a change in emergency classification, review and approve Form 5790-102-02 (EMERGENCY NOTIFICATION REPORT FORM), submitted by the REC, in accordance with Section 6.11 of this procedure.

6.9.10 If (and when) the REC submits Form 5790-204-01 (OFF-SITE PROTECTIVE ACTION RECOMMENDATION CHECKLIST) for approval, process the form in accordance with Section 6.12 of this procedure.

6.9.11 Ensure the Radiation Protection Group continuously mans the Health Physics Network (HPN) link with the NRC (when required) and provides radiological and meteorological information to the NRC as requested.

6.9.12 If the plant conducts a Site Evacuation (or removal of non-essential personnel from the site following a Plant Evacuation) direct the REC to coordinate the procession of evacuees from the site with the RPSS (and off-site authorities if off-site protective actions such as evacuation or sheltering have been implemented).

6.9.13 If habitability, environmental radiological conditions or other conventional hazards dictate, consider implementation of protective actions for ERO personnel based on REC recommendations. Refer to Section 6.14 of this procedure for Emergency Director instructions regarding personnel protective actions including:

A. Use of protective anti-contamination clothing.

B. Issuance and use of Potassium Iodide (KI) for ERO personnel.

C. Emergency exposure authorizations (in excess of MNGP or NRC Limits).

D. Plant or Site evacuation.

6.9.14 When the criteria for event termination or transition to Recovery is met direct the REC to coordinate the development of recovery item list(s) which identify short-term and long-term radiological considerations to be taken into account during the recovery phase.

6.9.15 If off-site radiological releases have occurred (in excess of ODCM limits) and when significant releases have been terminated consider increasing the frequency (and scope) of the MNGP Radiological Environmental Monitoring Program (REMP). Direct the REC to contact the RPSS to initiate REMP activities.

6.10 Emergency Notification Follow-up Messages

NOTE: Emergency Notification Follow-up Message Forms are generated by computer (MIDAS) and transmitted to the State EOC PAC to aid in their dose projection calculations. Follow-up Messages should be issued about every 30 minutes and/or when significant changes in emergency classification, plant conditions or radiological releases occur.

6.10.1 Upon receipt of an Emergency Notification Follow-up Message (from the REC) review the form for completeness and:

A. Note the date and time (at the top of Page 1) which indicates when the form was generated by MIDAS (question the REC on the issuance of follow-up messages that are more than 1 hour old).

B. Ensure the proper (current) emergency class is indicated.

C. Note the wind direction and affected sectors indicated on the form. Briefly compare the affected sectors and/or wind direction to those previously indicated to determine if new affected sectors are identified (due to wind shifts).

D. Review the projected integrated dose section (bottom of Page1) to determine if any projected off-site dose exceeds the Protective Action Guides (PAGs). If so, discuss the formulation of Off-site Protective Action recommendations, based on projected dose, with the REC.

6.10.2 If the NRC is present (in the TSC) briefly review the completed form with your NRC counterpart (if available) before issuing the form.

6.10.3 Discuss any questions regarding the information on the form with the REC.

6.10.4 Upon completion of the review (and when satisfied that the information contained on the form is accurate) sign, date and time the form (at the bottom of Page 2).

6.10.5 Either return the signed form to the REC (with instructions to have it transmitted) or forward the form delivered to the Lead EC for transmittal.

6.11 Emergency Classification Changes

CAUTION

Emergency classification changes *SHALL* be transmitted to the State and Counties within 15 minutes.

6.11.1 **Classification** - When informed of plant parameters, radiological release levels or events which indicate that a change in emergency classification may be appropriate evaluate the emergency classification change as follows:

A. Confirm that the indications have been verified using redundant or coincidence indications.

B. Review the applicable guideline(s), initiating condition(s) and Emergency Action Level(s) (EALS) in EPIP A.2-101 to determine the appropriate emergency class (if not already done by the TSC or EOF staffs).

C. If multiple events and/or indications are involved re-classify the emergency based on the event (or indication) that results in the highest (most conservative) emergency classification.

D. Consider the effect that combinations of events have, that, if taken individually, would constitute a lower emergency classification but collectively may exceed the criteria for a higher classification.

6.11.2 Make an announcement in the TSC that a change in emergency classification is being considered. If the TSC has responsibility for off-site communications, instruct TSC personnel to prepare for processing a classification change.

NOTE: The preliminary announcement of a potential classification change will aid the REC and Emergency Communicators in preparing to make the required 15 minute notifications to the State and Counties when the declaration occurs.

6.11.3 Confer with the TSC Group Leaders and Emergency Manager (if not already done) regarding the proposed change in emergency class.

6.11.4 If the NRC is present (in the TSC) review the proposed classification change with your NRC counterpart (this review is for information only and not to obtain concurrence).

6.11.5 If the evaluation outlined above has been completed (indicating a change in emergency classification is warranted) re-classify the emergency.

6.11.6 **Declaration** - Declare the emergency class as follows:

A. If the EOF has not assumed responsibility for off-site communication, then declare the emergency class.

1. Announce the new emergency classification in the TSC.

2. Inform the REC of the new emergency class and the time of declaration.

3. Ensure the new emergency classification is announced on the site PA system (Access #305)

B. If the EOF has assumed responsibility for off-site communication immediately inform the Emergency Manager (EM) of the classification change. The EM is responsible for declaration and off-site notifications.

1. Announce the new emergency classification in the TSC.

6.11.7 **Notification** - If the EOF has not assumed responsibility for off-site notifications, make the off-site notifications as follows:

A. Instruct the REC to complete Form 5790-102-02 indicating the new emergency classification and submit the form for review and approval.

CAUTION

If the new emergency classification is General Emergency, Off-site Protective Action Recommendations are required and should be specified on the Emergency Notification Report Form which transmits the classification change.

B. Review the completed Emergency Notification Report Form and:

1. Verify the appropriate emergency classification is indicated.

2. Verify the time of the emergency classification.

3. If the new emergency class is a General Emergency, verify Off-site Protective Action Recommendations are specified on the form. Prior to (or simultaneously with) its transmittal, a telephone call should be initiated (by the ED or REC) to the Planning Chief (at State EOC PAC) to explain the basis for the recommendations (refer to Section 6.12 of this procedure for additional instructions).

4. Sign the form in the space provided.

C. Forward the approved Emergency Notification Report Form promptly to the Lead EC for immediate transmittal to the State and Counties (within 15 minutes of the re-classification).

6.11.8 Direct the TSC Emergency Communicators to announce the new emergency classification on the site PA system.

6.11.9 Direct the ED Recorder to record the emergency re-classification in the ED Log Book.

6.11.10 Ensure the new emergency classification is posted on the Organization Status Board in the TSC.

6.11.11 Direct the Lead EC to complete Form 3195 (EVENT NOTIFICATION WORKSHEET) reflecting the classification change and submit the completed form for review and approval.

6.11.12 Upon receipt of the completed Form 3195:

A. Review the form for completeness.

B. Sign, date and time the form in the space provided (SM signature box).

C. Promptly return the approved form to the Lead EC with instructions to transmit the information to NRC Headquarters (via the ENS) immediately following state and local notifications and not to exceed one hour of the classification change.

6.12 Off-site Protective Action Recommendations

6.12.1 Continuously project off-site doses throughout the duration of the event (Integrated Dose section of the Emergency Notification Follow-up Message).

6.12.2 Direct the REC to formulate Off-site Protective Action Recommendations based on the following:

A. Projected off-site dose(s) compared to MNGP Conservative Protective Action Guides (PAGs).

CAUTION

Off-site Protective Action Recommendations *SHALL* be transmitted to the State and Counties within 15 minutes.

6.12.3 Transmit Off-site Protective Action Recommendations (PARs) using the following forms:

A. Off-site Protective Action Recommendations made (required) upon declaration of a General Emergency should be specified on Form 5790-102-02 and transmitted with the emergency classification change notification (within 15 minutes of the GE declaration).

B. Off-site Protective Action recommendations made based on projected doses should be specified on Form 5790-204-01.

6.12.4 When the REC submits off-site protective action recommendations review the applicable form and:

A. Verify the form is complete.

CAUTION

If protective actions are being recommended for subarea 5N, protective actions required for Sherco Plant personnel (located in the southwest corner of 5N) should be discussed with the Utility Management.

B. Note the affected sectors (A-R) and affected Sub-Areas (e.g., 2, 5E, 5N, etc.) identified on the form.

6.12.5 Briefly discuss the basis for the recommendations with the REC, NRC (if present), and State or County authorities. Consider review of the following information as necessary:

A. The Emergency Notification Follow-up Message (or MIDAS printout) which projected off-site doses exceeding the PAGs.

B. The current (or forecast) meteorological conditions (e.g. wind shifts) which affect the recommendation.

C. Identify population centers affected by the recommendations including:

1. When the population will be affected based on plume direction, wind speed, etc.

2. Evacuation time estimates for the affected population.

3. Special groups or facilities within the affected population of area that may require special consideration (e.g., hospitals, nursing homes, etc.).

D. Review the protective actions required for Sherco Plant personnel if the recommendations include Subarea 5N.

6.12.6 When the basis for the recommendations is understood sign, date and time the form in the space provided.

6.12.7 Determine who (Emergency Director or REC) will contact the State EOC PAC to explain the basis for the recommendations.

6.12.8 Promptly either return the signed form to the REC with instructions to have it transmitted to the State (or Counties prior to State EOC Activation).

6.12.9 Prior to (or simultaneous with) the transmittal of Off-site Protective Action Recommendations to the State ensure a call is initiated (by the ED or REC) to the State EOC PAC to explain the basis for the recommendations.

6.12.10 If the recommendations include Subarea 5N contact Generation management to determine the best course of action regarding the Sherco Plant in accordance with the criteria in EPIP A.2-204.

6.12.11 Ensure the protective action recommendations made are indicated on the Radiological Status Board in the TSC.

6.12.12 Ensure the EOF (Emergency Manager),and JPIC are informed of the off-site protective action recommendations being made.

6.12.13 Ensure the REC informs the NRC regarding the off-site protective actions via the HPN system.

6.12.14 Direct the ENS Technical Communicator to inform NRC Headquarters of the off-site protective actions via the ENS.

6.12.15 Direct the REC to monitor and follow-up on the implementation of the recommendations (with the State) and indicate the status of implementation on the status board and PAR Map in the TSC.

6.12.16 Periodically check on the status of protective action implementation. If, after 1 hour, protective actions have not been initiated (e.g. PANS activated) direct the REC to contact the State and determine the status of initiating protective actions.

6.12.17 If the protective actions actually implemented are different than those recommended ensure the EOF and JPIC are promptly informed of the protective actions taken.

6.12.18 Direct the REC to continue with off-site dose assessment and formulate subsequent off-site protective action recommendations based on projected dose and MNGP Protective Action Guides (PAGs).

6.12.19 Issue additional off-site protective action recommendations (as necessary) in accordance with the instructions in this section.

6.13 TSC Radiological Monitoring and Control

6.13.1 Ensure the REC continuously monitors radiological conditions in the TSC and immediate environs by:

A. Conduct of periodic habitability surveys in occupied areas of the TSC, Control Room, OSC, Access Control and Security Building.

B. Operation of the PIOPS CAM immediately outside the TSC by the elevator.

C. Operation of the portable DARM in the TSC.

6.13.2 Ensure all TSC personnel are issued dosimetry which is periodically checked (prompt TSC personnel during briefings).

6.13.3 If personnel exposures approach MNGP annual administrative limits (2000 mrem TEDE) direct the REC to evaluate exposures and provide recommendations in accordance with EPIP A.2-401 (EMERGENCY EXPOSURE CONTROL) including:

A. Evacuation of less essential ERO personnel.

B. Logging of exposures and rezeroing dosimeters or issuance of high range dosimetry to essential personnel.

C. Authorization of emergency exposures (up to 5 rem TEDE) for essential personnel.

6.13.4 If significant releases are occurring (in excess of the Alert levels specified in EPIP A.2-101 ensure the REC coordinates the establishment of EFT and EVS boundaries.

6.13.5 If (and when) loose surface contamination levels exceed 1000DPM/100CM^2, ensure the REC establishes strict contamination control measures for the EFT and EVS boundaries in accordance with A.2-402 (ON-SITE RADIOLOGICAL MONITORING).

6.14 TSC Protective Actions and Evacuation

6.14.1 If elevated contamination levels are detected in the uncontrolled areas of the Plant, consider implementing the following protective actions based on REC recommendations.

A. Direct the REC to post and control contaminated areas (and decontaminate if possible).

B. Consider protective clothing use in the TSC.

C. Ensure the REC (and TSC Radiation Protection staff) initiate strict contamination control measures including monitoring of food stuffs, etc. prior to consumption.

D. Direct the REC to initiate personnel decontamination procedures, as necessary. Personnel may need to be sent to Access Control or the EOF for decontamination.

E. Consider relocation of the OSC (to the backup OSC).

6.14.2 If elevated radiation levels exist in the Plant, consider implementing the following protective actions based on REC recommendations.

A. Evacuation of non-EFT or EVS boundary areas of the Plant.

B. Evacuation of non-essential personnel from the Site.

C. Initiate exposure tracking and emergency exposure authorizations for essential TSC personnel.

6.14.3 If elevated airborne radiation levels exist in the TSC, consider implementing the following protective actions based on REC recommendations.

A. Evacuation of non-EFT or EVS boundary areas of the Plant.

B. Evacuation of non-essential personnel from the Plant.

C. Initiate tracking of DAC Hours and emergency exposure authorizations for essential TSC personnel.

6.14.4 If thyroid doses of ERO personnel are projected to exceed 25 rem TEDE (FDA recommended level for KI use), consider issuance of Potassium Iodide (KI) to essential personnel (including Field Teams) and evacuation of non-essential ERO personnel.

6.14.5 If the TSC becomes uninhabitable for any reason, then:

A. The Emergency Director should relocate to the Control Room.

B. TSC staff should relocate to the EOF, Backup EOF or as directed by the ED.

6.15 Emergency Director Turnover

6.15.1 Upon arrival at the TSC the on-coming Emergency Director should initiate a Form 5790-213-03 (EMERGENCY DIRECTOR TURNOVER CHECKLIST) and complete the turnover in accordance with the checklist instructions.

6.16 Event Termination or Recovery

6.16.1 Continue to assess plant and environmental conditions throughout the event. When all of the following criteria are met consider termination of the emergency or the transition to the Recovery Phase:

A. The plant is in a stable condition with at least one fission product barrier intact.

B. No radioactive releases are being made to the environment in excess of plant ODCM limits.

C. The potential for future degradation of plant conditions is small.

6.16.2 When the above conditions are satisfied, implement the applicable Section(s) of EPIP A.2-602 (EVENT TERMINATION OR RECOVERY).

7.0 FIGURES

None

EMERGENCY PLAN IMPLEMENTING PROCEDURE - TABLE OF CONTENTS

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1.0 PURPOSE

The purpose of this procedure is to provide instructions for collection and handling of small volume liquid samples obtained from the Post Accident Sampling System during and following an Emergency.

2.0 APPLICABILITY

2.1 An emergency (Alert or higher classification) has been declared at Monticello Nuclear Generating Plant which involves abnormal or elevated radiological conditions which preclude use of normal sampling methods.

2.2 The REC/CSL has requested analysis of RHR or Jet Pump liquid samples.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Radiological Emergency Coordinator (REC) is responsible for:

3.1.1 Overall coordination of the Radiation Protection and Chemistry Group activities.

3.2 The Chemistry Section Leader (CSL) is responsible for:

3.2.1 Overall direction for PASS sampling and analysis.

3.3 The Chemistry Coordinator is responsible for:

3.3.1 Coordination of Chemistry group activities in the Chemistry Lab.

3.4 The Chemistry Technicians (Chem Techs) is responsible for:

3.4.1 Performing post accident sampling using the PASS system.

4.0 DISCUSSION

The primary objective of the Post Accident Sampling System (PASS) is to obtain a representative liquid and gas samples for radiochemical analysis. The liquid samples taken from this system are considered to be representative of liquids within the reactor vessel and suppression pool areas.

The Post Accident Sampling System is located on the south side of the 951' level of the Turbine Building. The most efficient route to the PASS is through access control and into the Turbine Building. Move to the 951' level via the east stairway.

The Post Accident Sampling System is used to meet NRC Commitment M03003A.

5.0 PRECAUTIONS

5.1 Exposures of sampling and analysis personnel ***SHALL*** be in accordance with A.2-401 (EMERGENCY EXPOSURE CONTROL).

5.2 Exposures to all personnel due to sampling and analysis operations should be maintained AS LOW AS IS REASONABLY ACHIEVABLE. Techniques such as temporary shielding, remote handling, and sample dilution prior to analysis should be considered to reduce exposure to personnel.

5.3 When actual or potential radiations levels so warrant, high range portable survey instruments, and self-reading dosimeters ***SHALL*** be provided to sampling and analysis personnel. Alarming dosimeters should also be considered.

5.4 Appropriate extremity dosimeters should be provided and worn when handling samples which themselves represent high level radiation sources.

5.5 Two Chem Techs should be used to obtain a post-accident sample.

6.0 INSTRUCTIONS

6.1 Pre-Sample Preparation

6.1.1 Perform the following:

A. Obtain key 55 and PASS cabinet key from the Shift Chemist key ring.

B. Initiate Form 5790-413-01 (SMALL VOLUME LIQUID SAMPLING AND ANALYSIS CHECKLIST) FIGURE 7.1.

C. Obtain sample type and number from Chemistry Coordinator per Procedure A.2-408 (SAMPLE COORDINATION DURING EMERGENCIES)

D. Call the Control Room to:

1. Determine whether A or B RHR is operating.

2. Verify RBCCW is operating.

3. Advise Control Room that Jet Pump flow transmitter may be affected. (Computer Point REC136 (REACTOR JET PUMP TOTAL FLOW))

6.2 Obtaining Samples

6.2.1 IF PASS demin water tank level is below the Low Level indicator, THEN fill the tank IAW A.2-418 (POST ACCIDENT SAMPLING STATION DEMIN WATER TANK FILL PROCEDURE).

6.2.2 Open nitrogen supply as follows:

A. OPEN main cylinder valve on one nitrogen cylinder.

B. OPEN corresponding manifold valve either PAS-57-21 (N_2 GAS BOTTLE MANIFOLD SHUTOFF) or PAS-57-11 (N_2 GAS BOTTLE MANIFOLD SHUTOFF).

C. CLOSE regulator outlet isolation valve.

D. Adjust regulator to 100 psi.

E. OPEN regulator outlet isolation valve.

6.2.3 Turn HC-730 (PASS VENTILATION) to start.

6.2.4 IF vacuum is not between 0.10" and 0.05", THEN adjust ventilation damper to obtain proper reading.

6.2.5 Insert PASS key into HC-600 (POWER SOURCE SELECTION SWITCH).

6.2.6 Place HC-600 to position A.

6.2.7 Obtain 20 ml sample vial (with velcro strip), cap, and retainer ring from the cabinet. Cap the vial and remove aluminum ring from the center of the cap.

6.2.8 Apply the sample label, from STEP 6.1.1, on the vial.

6.2.9 Using flashlight and inspection mirror, check condition of needles.

A. IF sample needles are bent or damaged, THEN straighten or replace the needles as necessary.

1. IF (re)installing needle(s), THEN perform the following:

a. Carefully align needle/installation tool with Luer-Lok.

CAUTION

If needle does not initially freely rotate onto Luer-Lok, needle may be misaligned with Luer-Lok. Use of more torque could jam needle in Luer-Lok.

B. Rotate needle about 1/2 turn onto Luer-Lok, until contact with internal seating surface is made. Needle should rotate freely, except for occasional "snags", until contact with internal seating surface is made.

C. Apply light torque to seat needle on the Luer-Lok seating surface.

6.2.10 Insert the capped vial into the sample station as follows:

A. Verify cylinder in sample cask.

B. Engage the cable into the sample vial by gently pushing the cable in and turning clockwise.

C. Remove the cylinder cask shield plug from the cask.

D. Raise the sample vial holder and insert capped vial. Ensure vial is firmly attached to velcro strip and aligned vertically.

E. Lower the sample vial into cask using the cable.

F. Place the shim on the LEFT SIDE of the cask.

G. Close the hydraulic valve and jack up the cask.

H. Gently roll the cask under the right side of the sample station.

CAUTION

Misalignment of the sample bottle in the station can damage sample needles and prevent obtaining a sample.

I. Using cable, raise sample vial into position; perform the following:

1. Do not use excessive force on cable to position bottle or obtain "bottle in" indication.

2. If practical, monitor vial, through observation port on side of sample station, for correct alignment as it enters the sample station. Bottle should not be tipped or catch on guide as it is raised into position.

3. If misaligned, lower bottle and re-position cask.

J. Maintain sample vial in elevated position and jack up the cask until it is flush with the bottom of the station.

CAUTION

Do not allow the demin water pressure to exceed 110 psi.

6.2.11 Adjust demin water pressure regulator to 100 psi.

6.2.12 Place HC-700 (LIQUID/GAS SELECTOR) to LIQD.

6.2.13 Place HC-626 (LIQUID SAMPLE SOURCE SELECTOR) to position 2 (Jet Pump) or position 4 (RHR) as required.

6.2.14 IF bottle position status light is not green,
THEN adjust the bottle holder.

6.2.15 Place HC-626 to position 1 (Jet Pump Bypass) or position 5 (RHR Bypass).

6.2.16 Place HC-500 (SAMPLE SOURCE SELECTOR SWITCH) to required sample position.

6.2.17 Place Liquid Return Selector switch to operating RHR loop.
IF neither RHR loop is operating,
THEN place the Selector switch to A.

6.2.18 IF pressure on PI-661 (LIQUID PRESSURE - PSIG) does not increase to near target system pressure within 10 min,
THEN cycle HC-500 between 'A' and 'B' sample points.

6.2.19 Slowly turn PCV-627 (FLOW CONTROL VALVE) clockwise to get a flow of at least 0.8 gpm for jet pump sample or at least 0.4 gpm for RHR (as indicated on FI-664 (SAMPLE RETURN FLOW)).

6.2.20 Flush for 10 minutes.

6.2.21 Record the flow and flush time on Form 5790-413-01.

6.2.22 Place HC-626 to position 2 (Jet Pump) or position 4 (RHR) for the required sample.

6.2.23 Adjust PCV-627 to 0.3 +/-0.1 gpm.

6.2.24 Flush for 5 minutes.

6.2.25 Record the following on Form 5790-413-01:

A. Flow per FI-664.

B. Pressure per PI-661.

C. Temperature per TI-660.

D. Conductivity per CI-663.

E. Radiation per RI-665.

6.2.26 Place HC-616-1 (SMALL VOL SAMPLE SWITCH) to position 1 (Take Sample).

6.2.27 After CV-616 light is energized, verify flow per FI-664 is zero.

6.2.28 Record sample time on Form 5790-413-01.

6.2.29 Fill the 10 ml syringe with 10 ml demin water.

6.2.30 Connect the syringe to the top-right side of the sample station.

6.2.31 Open the two block valves and PAS-63.

6.2.32 Inject the 10 mls of water into the line.

6.2.33 Close PAS-63.

6.2.34 Remove the syringe and fill it with air.

6.2.35 Reattach the syringe.

6.2.36 Open PAS-63.

6.2.37 Inject the air.

6.2.38 Close PAS-63 and the two block valves.

6.2.39 Remove the syringe.

6.2.40 Place HC-616-1 to OFF.

6.2.41 Place HC-500 to OFF.

6.2.42 Place HC-616-1 to position 3 (Flush Loop).

6.2.43 Adjust PCV-627 for maximum flow.

6.2.44 Flush for 2 minutes or until RI-665 reaches a minimum.

6.2.45 Place HC-626 to OFF.

6.2.46 Place HC-616-1 to OFF.

6.2.47 Turn PCV-627 fully counterclockwise.

6.2.48 IF no additional sampling is required,
THEN perform Procedure A.2-417 (DRAINING THE TRAP, SUMP, AND COLLECTOR OF POST ACCIDENT SAMPLING SYSTEM).

6.2.49 Notify Control Room that sampling is completed.

6.3 Removing Vial From Sample Station

CAUTION

Observe appropriate radiological precautions when handling vial, as potentially high dose rates may exist.

NOTE: Do not twist the cable. This would bend the needles.

6.3.1 Remove the sample vial from the sample station as follows:

CAUTION

Removing bottle when misaligned could break bottle or damage sample station.

A. Pull up on the cable. If unusual force is required to remove sample vial from station, investigate and correct as required bottle alignment.

B. Open the hydraulic valve.

C. Roll the cask from under the sample station.

D. Install shield plug in cask top.

E. Disengage the cable from the sample vial by turning the cable counterclockwise and pulling gently outward.

6.3.2 Turn HC-730 to stop.

6.4 <u>Sample Transport and Analysis</u>

6.4.1 Transport the small volume liquid sample in a shielded container for high activity samples or use a remote carrying device for low activity samples.

6.4.2 Perform analysis requested by REC/CC/CSL IAW Chemistry Manual Procedures.

6.4.3 Complete Form 5790-413-01.

7.0 FIGURES

FIGURE

7.1 Forms Utilized in this Procedure

1. 5790-413-01 (SMALL VOLUME LIQUID SAMPLING AND ANALYSIS CHECKLIST)

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I/lcc

1.0 PURPOSE

The purpose of this procedure is to provide instructions and precautions for collection, handling, and analysis of large volume liquid during and following an emergency.

2.0 APPLICABILITY

2.1 The REC/CC/CSL has requested a dissolved gas analysis of RHR or jet pump liquid samples, or a large volume liquid sample for off-site analysis or on-site if coolant activity is low enough that a large volume sample can be handled without undue exposure to technicians.

2.2 Actual or potential radiological conditions are such that special methods and/or precautions are necessary in order to collect and analyze samples under conditions which may present a much greater than normal radiation hazard to individuals performing the sampling and analyses, or the normal sample points are not available.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Radiological Emergency Coordinator (REC) is responsible for:

3.1.1 Overall direction of the Radiation Protection and Chemistry Group activities.

3.2 The Chemistry Section Leader (CSL) is responsible for:

3.2.1 Overall direction of PASS sampling and analysis.

3.2.2 Overall coordination of Chemistry Group activities.

3.3 The Chemistry Coordinator is responsible for:

3.3.1 Coordination of Chemistry Group activities in the Chemistry Lab.

3.3.2 Coordination of sample logging, identification and documentation.

3.4 The Chemistry Technicians (Chem Techs) are responsible for:

3.4.1 Implementation of this procedure.

4.0 DISCUSSION

4.1 The Post Accident Sampling Station is located on the south side of the 951' level of the Turbine Building. The most efficient route to the PASS is through Access Control and into the Turbine Building. Move to the 951' level via the east stairway.

4.2 The Post Accident Sampling System is used to meet NRC Commitment M03003A.

5.0 PRECAUTIONS

5.1 Exposures of sampling and analysis personnel ***SHALL*** be in accordance with A.2-401 (EMERGENCY EXPOSURE CONTROL).

5.2 Exposures to all personnel due to sampling and analysis operations should be maintained as low as is reasonably achievable. Techniques such as temporary shielding, remote handling, and sample dilution prior to analysis should be considered to reduce exposure to personnel.

5.3 When actual or potential radiation levels so warrant, high range portable survey instruments, and self-reading dosimeters should be provided to sampling and analysis personnel. Alarming dosimeters should also be considered.

5.4 Appropriate extremity dosimeters should be provided and worn when handling samples which themselves represent high level radiation sources.

5.5 Two Rad Prot Specs should be used to obtain a post-accident sample when applicable and possible.

6.0 INSTRUCTIONS

6.1 Preparation for Sampling

6.1.1 Obtain key 55 and the PASS cabinet key from the Shift Chemist key ring.

6.1.2 Initiate a Form 5790-414-01 (LARGE VOLUME LIQUID SAMPLING AND ANALYSIS CHECKLIST).

6.1.3 Obtain sample type and number from Chemistry coordinator (see FIGURE 7.7 in A.2-408 (SAMPLE COORDINATION DURING EMERGENCIES)).

6.1.4 Call the Control Room to:

A. Determine whether A or B RHR is operating.

B. Verify RBCCW is operating.

C. Advise the Control Room that jet pump flow transmitter may be affected. (Computer Point REC136 (REACTOR JET PUMP TOTAL FLOW)).

6.2 Obtaining Samples

6.2.1 IF PASS demin water tank level is below the Low Level indicator, THEN fill the tank IAW A.2-418 (POST ACCIDENT SAMPLING STATION DEMIN WATER TANK FILL PROCEDURE).

6.2.2 Open nitrogen supply as follows:

A. OPEN main cylinder valve on one nitrogen cylinder.

B. OPEN corresponding manifold valve either PAS-57-21 (N_2 GAS BOTTLE MANIFOLD SHUTOFF) or PAS-57-11 (N_2 GAS BOTTLE MANIFOLD SHUTOFF).

C. CLOSE regulator outlet isolation valve.

D. Adjust regulator to 100 psi.

E. OPEN regulator outlet Isolation valve.

6.2.3 Turn HC-730 (PASS VENTILATION) to start.

6.2.4 IF vacuum is not between 0.10" and 0.05", THEN adjust ventilation damper to obtain proper reading.

6.2.5 Insert PASS key into HC-600 (POWER SOURCE SELECTOR SWITCH).

6.2.6 Place HC-600 to position A.

6.2.7 Obtain 20 ml sample vial (with velcro strip), cap, and retainer ring from cabinet. Cap the vial and remove the aluminum ring from the center of the cap.

6.2.8 Label the vial with the sample number obtained in STEP 6.1.3.

6.2.9 Using a flashlight and inspection mirror, check the condition of the needles.

A. IF sample needles are bent or damaged, THEN straighten or replace the needles as necessary.

1. IF (re)installing needle(s), THEN perform the following:

a. Carefully align needle/installation tool with Luer-Lok.

CAUTION

If needle does not initially freely rotate onto Luer-Lok, needle may be misaligned with Luer-Lok. Use of more torque could jam needle in Luer-Lok.

B. Rotate needle about 1/2 turn onto Luer-Lok, until contact with internal seating surface is made. Needle should rotate freely, except for occasional "snags", until contact with internal seating surface is made.

C. Apply light torque to seat needle on the Luer-Lok seating surface.

6.2.10 Insert the capped vial into the sample station as follows:

A. Verify cylinder in cask.

B. Engage the cable in the sample vial by gently pushing the cable in and turning clockwise.

C. Remove the cylinder cask shield plug from the cask.

D. Raise the sample vial holder and insert the capped vial. Ensure vial is firmly attached to velcro strip and aligned vertically.

E. Lower the sample vial into the cask using the cable.

F. Place the shim on the RIGHT SIDE of the cask.

G. Close the hydraulic valve and jack up the cask.

H. Gently roll the cask under the left side of the station.

CAUTION

Misalignment of the sample bottle in the station can damage sample needles and prevent obtaining a sample.

I. Using cable, raise the sample vial into position; perform the following:

1. Do not use excessive force on cable to position bottle or obtain "bottle in" indication.

2. If practical, monitor vial, through observation port on side of sample station, for correct alignment as it enters the sample station. Bottle should not be tipped or catch on guide as it is raised into position.

3. If misaligned, lower bottle and re-position cask.

J. Maintain sample vial in elevated position and jack up the cask until lit is flush with the bottom of the station.

CAUTION

Do not allow the demin water pressure to exceed 110 psi.

6.2.11 Adjust demin water pressure regulator to 100 psi.

6.2.12 Place HC-700 to LIQD.

6.2.13 Place HC-626 (LIQUID SAMPLE SOURCE SELECTOR) to position 2 (JET PUMP) or position 4 (RHR) as required.

6.2.14 IF bottle position status light is not green,
THEN adjust the bottle holder.

6.2.15 Place HC-626 to position 1 (JET PUMP BYPASS) or position 5 (RHR BYPASS).

6.2.16 Place HC-500 (SAMPLE SOURCE SELECTOR SWITCH) to required sample position.

6.2.17 Place LIQUID RETURN SELECTOR switch to the operating RHR loop.
IF neither RHR loop is operating,
THEN place the selector switch to A.

6.2.18 IF pressure on PI-661 (LIQUID PRESSURE - PSIG) does not increase to near target system pressure within 10 minutes,
THEN cycle HC-500 between 'A' and 'B' sample points.

6.2.19 Slowly turn PCV-627 (FLOW CONTROL VALVE) clockwise to get a flow of at least 0.8 gpm for jet pump sample or at least 0.4 gpm for RHR (as indicated on FI-664 (SAMPLE RETURN FLOW)).

6.2.20 Flush for 10 minutes.

6.2.21 Record flow and flush time on Form 5790-414-01.

6.2.22 Place HC-626 to position 2 (JET PUMP) or position 4 (RHR) for the required sample.

6.2.23 Adjust PCV-627 to 0.3 +/-0.1 gpm.

6.2.24 Flush for 5 minutes.

6.2.25 Record the following on Form 5790-414-01:

A. Flow per FI-664.

B. Pressure per PI-661.

C. Temperature per TI-660.

D. Conductivity per CI-663.

E. Radiation per RI-665.

6.2.26 Place HC-601 to position 2 (START P-601).

6.2.27 Flush for 10 minutes.

6.2.28 Place HC-601 to position 10 (TAKE LIQUID SAMPLE).

6.2.29 Press and hold in pushbutton HC-629-1 for 10 seconds.

6.2.30 Place HC-601 to OFF.

6.2.31 Inform Control Room sampling is completed.

CAUTION 1

Do not position body at any time directly over cask, as potentially high dose rates may exist.

CAUTION 2

Removing bottle when misaligned could break bottle or damage station.

6.2.32 Lower the sample into the large volume cask by pulling up on the cable. DO NOT twist the plunger. If unusual force is required to remove sample vial from station, investigate and correct as required bottle alignment.

6.2.33 Lower the cask.

6.2.34 Roll the cask out from under the station.

6.2.35 Install the shield plug in the cask.

6.2.36 Disengage the cable from the sample vial by turning the cable counterclockwise and pulling gently outward.

6.2.37 Place or verify HC-601 to OFF.

6.2.38 Place HC-500 to OFF.

6.2.39 Place HC-628-1 (FLUSH SYSTEM) to position 2 (START FLUSH), AND adjust PCV-627 for MAXIMUM flow per FI-664.

6.2.40 After RI-665 shows radiation has decreased significantly, place HC-628-1 to position 3 (FLUSH V-610 LOOP).

6.2.41 WHEN the radiation no longer decreases, place HC-628-1 to position 4 (FLUSH P-601 LOOP).

6.2.42 WHEN the radiation no longer decreases, place switch HC-628-1 to position 5 (FLUSH P-601 LOOP).

6.2.43 WHEN the radiation no longer decreases, place switch HC-628-1 to position 6 (FLUSH PIPING STATION).

6.2.44 Flush for 3 minutes.

6.2.45 Place HC-628-1 to position 7 (FLUSH CV-622 LOOP).

6.2.46 IF any abnormal radiation levels are indicated on RI-665, THEN repeat 6.2.40 through 6.2.45.

6.2.47 Place HC-626 to OFF.

6.2.48 Place HC-628-1 to OFF.

6.2.49 Turn PCV-627 fully counterclockwise.

6.2.50 IF no additional sampling is required, THEN perform A.2-417 (DRAIN THE TRAP, SUMP, AND COLLECTOR OF POST ACCIDENT SAMPLING SYSTEM).

6.2.51 Turn HC-730 to stop.

6.3 Sample Transport and Analysis

6.3.1 Transport the large volume liquid sample or dissolved gas sample in a shielded container for high activity samples or use a remote carrying device for low activity samples.

6.3.2 Perform analysis requested by REC/CC/CSL IAW Chemistry Manual Procedures.

6.3.3 IF a large volume sample is to be sent off-site for analysis, THEN notify the REC for instructions.

7.0 FIGURES

None

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I/saw

1.0 PURPOSE

This procedure provides instructions and guidance for the documentation of events and other important data during an emergency.

2.0 APPLICABILITY

2.1 An emergency condition corresponding to an Alert or a higher emergency classification has been declared at the Monticello Nuclear Generating Plant.

2.2 Emergency response personnel are responsible for maintaining assigned logs and forms.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Emergency Director (Duty Shift Mgr until relieved) is responsible for:

3.1.1 Overall direction and coordination of record-keeping activities.

3.2 The Support Group Leader is responsible for:

3.2.1 Logistics and administrative aspects of record-keeping during an emergency.

3.2.2 Forwarding copies of records to the Site Emergency Planners.

3.2.3 Preserving the records IAW 4 AWI-02.10.01

3.3 The ERO and Response Center Coordinators are responsible for:

3.3.1 Maintenance of accurate logs and forms.

4.0 DISCUSSION

4.1 Accurate record-keeping during an emergency is necessary to provide:

4.1.1 Official documentation which may be used to reconstruct the emergency for critique or analysis.

4.1.2 Checklists to ensure that necessary tasks are completed.

4.1.3 Information and data collection during an emergency.

5.0 PRECAUTIONS

5.1 Although record-keeping and form completion is important, the protection of personnel, on-site and off-site is the prime concern. At no time should the completion of logs or forms delay the implementation of protective actions.

6.0 INSTRUCTIONS

6.1 General

6.1.1 The Emergency Director (Shift Manager until relieved) should delegate the record keeping task to qualified individuals in their respective emergency operations center.

6.1.2 All individuals responsible for record keeping should file completed reports/forms in the appropriate container provided for Emergency Records.

6.1.3 All completed forms and checklists should be forwarded to the Support Group Leader at the termination of the emergency condition or when directed by the Emergency Director.

NOTE: All records *SHALL* be maintained and consolidated (at conclusion of emergency condition) and filed to provide a permanent record of activities and events. These records *SHALL* be used to assist the Emergency Director in making decisions and to provide a history of events for final reports.

6.2 Log Keeping

The following is a description of the various logs and the information required to be logged in each.

6.2.1 Operations Reactor Log - The operations staff will log operational events in the Operations Reactor Log Book, located in the Control Room.

6.2.2 Emergency Call Log - Shift Emergency Communicators responsible for contacting personnel and/or organizations should maintain an official Emergency Call Log, to log miscellaneous contacts to and from off-site authorities or personnel.

Information required on the Emergency Call Log is:

A. Time of contact and initials of communicator.

B. Contact - individual/organization contacted or individual/organization calling.

C. Message - brief description of the message or purpose of contact.

6.2.3 Emergency Director Log - The Emergency Director ***SHALL*** maintain an official log of all significant events occurring during the course of an emergency. The Emergency Director or the Support Group Leader may designate an individual to maintain the Emergency Director Log. The individual keeping this log should locate himself near the Emergency Director to facilitate the flow of information in a timely and accurate manner.

The following items are examples of events and data that should be recorded in the Emergency Director Log:

A. Significant events and the times at which they occur.

B. Reports made to the Emergency Director (plant status, radiological conditions, etc.)

C. Notifications

D. Hazard assessment (operational or radiological)

E. Radiological monitor alarms

F. Survey results, area and personnel

G. Evacuations

H. Injuries and medical care

I. Meteorological information

J. Emergency teams dispatched (survey, first aid, repair, fire, etc.)

K. Re-entry efforts

L. Recovery efforts

M. Off-site dose projections

N. Any other items deemed necessary or pertinent

6.2.4 The remaining logs, listed below, are unofficial. These logs provide a bound book for the notes, calculations and recommendations of each of the groups in the plant Emergency Organization. The responsibility for maintaining the log and, ultimately, for deciding what information to log, belongs to each respective group leader.

A. Operations Group Log

B. Maintenance Group Log

C. Engineering Group Log

D. Health Physics Group Log

E. Support Group Log

F. Security Group Log

G. Radiation Protection Coordinator Log

H. OSC Coord Log

6.3 Record Reviews

6.3.1 When the event has terminated, collect all forms and checklists generated during the event.

6.3.2 Make copies of all Log Book entries.

NOTE: DO NOT TEAR OUT PAGES

6.3.3 Forward materials to the Site Emergency Planner for evaluation IAW MTCP 6.3 (POST EMERGENCY PLAN ACTIVATION REVIEWED).

7.0 FIGURES

None

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I/mab

1.0 PURPOSE

The purpose of this procedure is to provide instructions and guidance for the handling of medical emergencies at the Monticello Nuclear Generating Plant. This procedure applies to both radiological and non-radiological medical emergencies.

2.0 APPLICABILITY

2.1 An accident has occurred at the MNGP resulting in personal injury requiring immediate first aid and off-site medical attention.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Shift Manager (or Control Room Supervisor) is responsible for:

3.1.1 Overall direction of emergency medical response on-site.

3.1.2 Notification of the local hospital and ambulance service.

3.2 The Fire Brigade Leader is responsible for:

3.2.1 Direction and coordination of the Fire Brigade.

3.2.2 Establishing and maintaining radio communications between the Fire Brigade and Control Room.

3.3 The Fire Brigade members are responsible for:

3.3.1 Administering First Aid, transporting the victim(s) to ambulance and assisting the ambulance attendants.

3.3.2 Assist Radiation Protection with victim decontamination.

3.4 The Plant Security Force is responsible for:

3.4.1 Emergency vehicle access, personnel accountability and vehicle egress.

3.4.2 Delivering the Ambulance Emergency Kit to the ambulance when it arrives on-site.

3.5 Radiation Protection/Chemical Technicians are responsible for:

3.5.1 Contamination control at the accident scene and in the transport vehicle.

3.5.2 Radiological monitoring of the victim and emergency response personnel and personnel and vehicle decontamination.

3.5.3 Ensure ambulance crew have necessary dosimetry and protective clothing.

3.6 Security Supervisor is responsible for:

3.6.1 The performance of SEC function for notifications and communications in accordance with Administrative Work Instructions under direction of the Shift Manager/Emergency Director.

3.6.2 Recommending/requesting suspension of safeguards requirement for emergency vehicle and personnel access, if needed.

4.0 DISCUSSION

4.1 Summary

This procedure provides instructions for the response of the plant Fire Brigade, Security and Radiation Protection personnel to any serious medical emergency (on-site) that may require immediate medical (first aid) treatment. It covers the time period from the accident until the injured person(s) depart the site by ambulance or other appropriate transportation.

5.0 PRECAUTIONS

5.1 In all cases the health and safety of the injured person(s) is the primary concern. Prompt medical treatment takes precedence over radiological decontamination, radiological monitoring or contamination control methods when serious injury involving the potential loss of life or limb has occurred.

5.2 Transport of a contaminated injured person to an off-site medical facility is a media sensitive event. Refer to 4AWI-04.08.01 (EVENT NOTIFICATIONS) and Form No. 3389 (EVENT NOTIFICATIONS) for making the appropriate notifications.

6.0 INSTRUCTIONS

6.1 First Person on the Scene

6.1.1 Quickly survey the area to determine if any immediate danger to yourself or the injured person(s) exists. If so, take the necessary precautions and remove yourself and the injured person from the hazardous area.

6.1.2 Notify the Control Room (5111) of the location and apparent nature of the injury.

6.1.3 Administer appropriate first aid.

6.1.4 Remain with the victim until the plant Fire Brigade arrives.

6.1.5 Assist the Fire Brigade and Radiation Protection as requested.

6.2 Control Room Supervisor (Shift Manager) or Control Room

NOTE: The following steps should be performed, as necessary, by the Control Room Supervisor (Shift Manager) as determined by the severity and nature of the incident.

6.2.1 Dispatch the plant Fire Brigade to the scene of the accident using Page #305 announcement or other appropriate means.

6.2.2 Establish and maintain a communications link (radio or telephone) with the Fire Brigade.

6.2.3 Direct the Fire Brigade Leader to initiate Form 5790-100-03 (FIRE BRIGADE LEADER MEDICAL EMERGENCY CHECKLIST). A copy of this form is in site first aid kits.

6.2.4 If the event is occurring during normal working hours (7:30 - 4:00) or during an outage (24 hrs/day), inform the Radiation Protection Coordinator (1135) of the accident location. During off-working hours radiological aspects of the accident will be assessed by the duty RPT and CT as members of the Fire Brigade.

6.2.5 If an ambulance is necessary, call 9-911 . Request an ambulance be sent to the MONTICELLO NUCLEAR PLANT.

6.2.6 Direct the Fire Brigade (or Radiation Protection) to make an immediate assessment to determine if the victim is presently contaminated (or potentially contaminated) and if (in their best estimation) the victim will be contaminated when transported to the hospital. This assessment should also consider the probable success of any decontamination efforts planned or in progress.

6.2.7 If the probability exists that the injured person will be contaminated when transported to the hospital, contact the Monticello-Big Lake Hospital (9-271-2248). Ask for the Emergency Department Supervisor (during normal work hours) or the Charge Nurse (during off-hours and):

A. Request they initiate the Hospital Assistance Plan;

B. Instruct them to prepare to receive a CONTAMINATED victim (based on information from scene);

C. Provide a brief description of known or suspected injuries.

6.2.8 Notify Security that an ambulance will be arriving on-site and:

A. Instruct Security to suspend safeguards-access requirements for off-site emergency support personnel and vehicle(s), if necessary. The Security Supervisor is responsible to determine whether the suspension will be required.

B. Inform them which building entrance the ambulance will use.

C. Instruct them to ready the Ambulance Emergency Kit and deliver it to the ambulance when it arrives or to the door selected for ambulance use.

6.2.9 Remain aware of the event status through communication with the Fire Brigade. Update the hospital with any changes in medical or contamination status (i.e., decontamination, etc.) by telephone until the ambulance has arrived on the scene.

6.2.10 If the injured person(s) is verified to be contaminated or contamination is suspected but cannot be monitored (due to the nature of the injuries) and the person will be transported to the hospital as such, an RPT/CT escort is required. Direct the Fire Brigade Leader to assign an RPT/CT to travel in the ambulance to the hospital.

6.2.11 If the injured person is contaminated when transported to the hospital, refer to 4AWI-04.08.01 and Form No. 3389 for instructions on making notifications.

6.2.12 If an RPT/CT escort is required, direct the remaining RPT/CT to contact two additional RPT/CTs: one to augment the duty shift and the other to report to the hospital and assist.

6.2.13 Notify the NMC/Xcel supervisor(s) of the individual(s) involved so that they can determine if Fitness for Duty Testing is necessary.

6.3 Plant Fire Brigade (Fire Brigade Leader)

6.3.1 When activated, follow the instructions in the PA announcement.

6.3.2 Initiate Form 5790-100-03 and take the appropriate actions described in the Checklist. A copy of the Fire Brigade Leader Checklist is stored in the site first aid kits.

6.4 Plant Security Force (Security Supervisor)

6.4.1 When informed by Operations that an ambulance has been summoned, the Security Supervisor should determine if a suspension of access-safeguards requirements will be required (in accordance with Security Implementing Procedure 03-05). If so, inform the SM/CRS to approve the suspension of safeguards.

6.4.2 Contact Operations or Fire Brigade Leader to determine which door or Controlled Area Portal will be used for the ambulance and removal of the injured person.

6.4.3 Ready the Ambulance Kit (located in the Security Building). Prepare dosimetry packets for issuance to the ambulance crew members per the instructions on Form 5790-100-02 (DOSIMETRY ISSUANCE FORM).

6.4.4 If security personnel are available, dispatch a Security Force Member to the Gatehouse to escort the ambulance to the accident scene.

6.4.5 Deliver the ambulance kit to the ambulance and issue dosimetry packets to the ambulance personnel.

6.4.6 Direct the ambulance to the door selected for use (escort if personnel are available).

NOTE: Compensatory measures are considered being taken if the ambulance and attendants are escorted on-site. If an ambulance and the attendants are allowed on-site without escorts, then a 1 hour notification must be made to the NRC.

6.4.7 If security personnel are available, dispatch a Security Force Member to attend the door or Controlled Area Portal used by the ambulance.

6.4.8 Upon completion of loading of the ambulance, coordinate the departure of the ambulance through the Vehicle Trap.

6.4.9 If ambulance personnel entered a Vital plant area during a drill, this event requires notification to the NRC. Refer to Security Implementing Procedure 05.02. A suspension of safeguards requires a 1 hour NRC notification.

6.4.10 If the injured individual leaves the site contaminated, immediately report to the Control Room to make the necessary notifications.

6.5 Radiation Protection/Chemistry

6.5.1 Respond to the accident scene with the Fire Brigade as directed by the PA announcement or Shift Supv.

6.5.2 Initiate Form 5790-100-04 (RADIATION PROTECTION SPECIALIST MEDICAL EMERGENCY CHECKLIST) and take the appropriate actions described in the Checklist. A copy of the Checklist is stored in the site first aid kits.

7.0 FIGURES

FIGURE

7.1 Medical Emergency Immediate Actions List

SHIFT MANAGER (CONTROL ROOM SUPERVISOR OR CONTROL ROOM)

1. Obtain location and nature of injury.
2. Dispatch Fire Brigade to accident scene.
3. Establish communications with Fire Brigade.
4. Notify Rad Prot Control (1135) during normal working hours.
5. Call (9-911), request an Ambulance if necessary.
6. Determine if victim(s) is/are contaminated.
7. If contaminated, notify Hospital (9-271-2248).
8. Notify Security (1193) of ambulance arrival.
9. Notify the Supervisor(s) of the individual(s) involved in the accident.

FIRE BRIGADE

1. Obtain First Aid Kit(s), Back board(s), Splint Kit.
2. Proceed to accident scene, establish communication.
3. Determine immediate hazards in accident area.
4. Administer First Aid.
5. Request ambulance if necessary.
6. Determine CAP to be used for removal of victim.
7. Stabilize and transport victim(s) to CAP if possible.
8. Survey and decontaminate (if possible).
9. Assist (escort) ambulance attendants.

RADIATION PROTECTION/CHEMISTRY

1. Respond to accident scene.
2. Determine radiological conditions in accident area.
3. Perform immediate survey of victim for contamination.
4. Notify Fire Brigade Leader of victim contaminated status.
5. Control and post accident area (if necessary).
6. Perform thorough contamination survey of victim(s).
7. Record surveys on WHOLE BODY SURVEY FORM.
8. Decontaminate victim if possible.
9. Escort ambulance (if victim contaminated).
10. Augment RPT/CTs at plant and hospital (if victim contaminated).

SECURITY

1. Assess the need for a Security Access waiver for ambulance.
2. Obtain Ambulance Kit and deliver to ambulance.
3. Issue TLD/DRD to ambulance crew if victim is within the protected area.
4. Open Vehicle Trap for ambulance ingress/egress.
5. Obtain victim(s) security badge upon egress.
6. Make notifications under direction of Shift Manager if individual is transported contaminated.

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1.0 PURPOSE

The purpose of this procedure is to provide instructions and guidance for the transfer of contaminated, injured patients(s) from the local hospital (Monticello-Big Lake) via ground or air ambulance to the definitive care center (North Memorial Hospital) or burn center (St. Paul Regions). It covers the time from ambulance (Helicopter) loading to arrival and unloading. In addition, it provides instructions for the monitoring and decontamination of the transfer vehicle or helicopter.

2.0 APPLICABILITY

2.1 An incident has occurred at the MNGP resulting in injured contaminated person(s) being treated at the Monticello-Big Lake Hospital, and

2.2 The local hospital staff has determined that the injured person(s) must be transferred to the North Memorial or St. Paul Regions Hospital and the injured person is verified to be contaminated at the time of transfer.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Hospital Staff is responsible for:

3.1.1 Patient care, decontamination and decision to transfer.

3.2 The Ambulance Attendants (or Helicopter Crew) are responsible for:

3.2.1 Patient care, handling and transfer.

3.3 Radiation Protection Technicians (RPT) are responsible for:

3.3.1 Radiological monitoring and radiological controls in the transfer vehicle.

3.3.2 Personnel and vehicle monitoring and decontamination.

3.4 Nuclear Medical Technicians (NMT) are responsible for:

3.4.1 Radiological monitoring and control (supplement Plant Radiation Protection).

3.4.2 Assist Plant Radiation Protection, as necessary.

4.0 DISCUSSION

4.1 Summary

This procedure provides instructions for the transfer of an injured contaminated patient from the Monticello-Big Lake Hospital to North Memorial Hospital or St. Paul Regions Burn Center via ground or air ambulance. The instructions in this procedure apply primarily to plant Radiation Protection personnel attending the contaminated patient while in transit. In addition, the procedure provides instructions for the radiological survey and decontamination of the emergency vehicle used for the transfer.

5.0 PRECAUTIONS

5.1 In all cases the health and safety of the injured person(s) is the primary concern. Prompt medical treatment takes precedence over radiological decontamination, monitoring or contamination control methods when serious injury involving the potential loss of life or limb has occurred.

5.2 Observe the HELICOPTER SAFETY RULES (FIGURE 7.1), when in the vicinity of the helicopter used for patient transfer. Follow all instructions provided by the pilot or ground crew.

6.0 INSTRUCTIONS

6.1 Transfer via Ground Transportation

6.1.1 Ensure ambulance crew members are issued dosimetry. Provide dosimetry to any attendants not already issued a TLD and dosimeter. Record the pertinent data on Form 5790-100-02 (DOSIMETRY ISSUANCE FORM).

6.1.2 Obtain any completed Form 5790-100-01 (PERSONNEL SURVEY FORM) and Form 5790-100-02 documenting dosimetry data and the results of any patient contamination surveys performed.

6.1.3 Obtain a Count Rate Survey Meter with pancake probe for use in the ambulance.

6.1.4 Ensure any ambulance personnel that will come in direct contact with the contaminated person or materials don appropriate protective clothing.

NOTE: The ambulance driver may not require protective clothing depending on the extent of contamination and the driver's involvement in handling the patient. The attending RPT should make this determination based on information from ambulance personnel.

6.1.5 Upon completion of loading, enter the ambulance and position yourself such that radiological surveys could be conducted enroute if necessary. If attendance in the ambulance is not possible (due to space limitations, etc.), arrange to follow the ambulance in a company or private vehicle.

6.1.6 If RPT attendance in the ambulance is not possible, provide instructions to ambulance personnel on contamination control techniques prior to their departure. Instruct them to park, close all ambulance doors and windows, and post the ambulance as a CONTROLLED AREA upon completion of unloading at the hospital.

6.1.7 If traveling in the ambulance, follow the direction of ambulance personnel and:

A. remain aware of the activities of ambulance personnel with respect to contamination spread. Note equipment and materials used that may be cross-contaminated;

B. conduct radiological surveys as necessary and provide advice and guidance on contamination control methods (i.e., changing gloves, etc.) to ambulance personnel;

C. relax contamination control if the patient's condition deteriorates and immediate medical attention is required.

6.1.8 Upon arrival at the hospital observe ambulance unloading and:

A. Advise and assist ambulance personnel with contamination control during the unloading process.

B. Instruct ambulance personnel to close all ambulance doors and windows and post the ambulance as a CONTROLLED AREA using signs and rope obtained from hospital emergency locker.

C. Instruct the ambulance crew to standby near the ER, after delivering the patient until properly monitored and released (i.e., frisked).

D. Instruct ambulance personnel to keep the ambulance gurney, used for contaminated patient transfer, inside the CONTROLLED AREA or place the gurney into the ambulance until the ambulance and gurney can be properly surveyed and released.

6.1.9 Proceed immediately to the ER designated to receive contaminated patients and ensure a Controlled Area is properly established.

NOTE: The first RPT to arrive at the hospital is primarily responsible for RP coverage in the Emergency Room. Area control, posting and monitoring outside the Controlled Area are the responsibilities of additional RPTs as they arrive.

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6.1.10 Don appropriate protective clothing (one complete PC package) and proceed into the Controlled area to assist hospital personnel. Refer to Procedure A.5-500 (CASUALTY CARE AT THE DEFINITIVE CARE CENTER) for instructions.

6.1.11 When time and RP resources permit, survey and release ambulance personnel as follows:

A. Assist ambulance personnel in doffing any protective clothing.

B. Perform a whole body frisk of all ambulance personnel prior to release.

C. Instruct any contaminated ambulance personnel to standby until decontaminated and unconditionally released.

6.1.12 Instruct ambulance personnel to return personal dosimetry. Record individual DRD OUT readings on Form 5790-100-02, used for dosimetry issuance. Retain TLDs and return to the plant for processing.

6.1.13 Survey and decontaminate the vehicle used for contaminated patient transfer when time and Radiation Protection resources permit. Refer to Section 6.3 of this procedure for survey and decontamination instructions.

6.2 Transfer via Air Transportation

NOTE: A RPT in attendance is desirable for both the loading/departure and arrival/unloading processes. The Nuclear Medicine Department at North Memorial can provide RP coverage for an arriving helicopter transfer with 30 minutes prior notice although all attempts should be made to ensure a plant RPT is present for helicopter arrival and unloading.

6.2.1 If the local hospital staff determines the patient will be transferred by helicopter, immediately dispatch a RPT to the designated hospital (North Memorial or St. Paul Regions). If no additional RPTs are available, depart the local hospital as soon as possible after helicopter departure and proceed to the definitive care center.

NOTE: Round-trip air travel time for NMMC to MBLH is approximately 45 minutes. Ground travel time from MBLH to NMMC is about 45 minutes which makes prompt departure necessary if an RPT is to be in attendance when the helicopter arrives at NMMC.

6.2.2 Prior to helicopter loading ensure the pilot and any helicopter crew members are issued dosimetry (TLD and 0-200 mRem DRD). Record the dosimetry issuance data on Form 5790-100-02.

6.2.3 Assist the helicopter crew with donning protective clothing prior to handling the contaminated patient. Protective clothing may be obtained from the local hospital emergency supplies.

NOTE: The pilot and crew may not require protective clothing depending on the extent of contamination and the involvement in handling the patient. The attending RPT should make this determination.

6.2.4 Obtain any PERSONNEL SURVEY FORMS that were completed at the local hospital and the DOSIMETRY ISSUANCE FORM (used for issuance to helicopter crew) and provide both forms to the helicopter pilot. Instruct the pilot to deliver both forms to the emergency room personnel at the definitive care center.

6.2.5 Observe the helicopter loading process. Ensure precautions are taken to minimize the potential spread of contamination during the loading process.

NOTE: The usual method of patient preparation for helicopter transport (wrapped, etc.) provides adequate contamination control/containment as long as the patient cocoon remains unopened.

6.2.6 Prior to helicopter departure, provide instructions to the pilot and crew on contamination control methods should opening the patient cocoon become necessary in flight.

6.2.7 If RPTs have been dispatched to the definitive care center (prior to helicopter departure), remain and quickly assist the hospital personnel with any recovery activities as follows. If no RPTs have been dispatched, proceed to 6.2.8

A. Assist hospital personnel in doffing protective clothing (as necessary). Survey (WB frisk) hospital personnel after doffing PCs.

B. Collect any dosimetry issued to hospital personnel and record DRD OUT readings on Form 5790-100-02.

C. Coordinate the surveying, decontamination (as necessary) and clearing of any Controlled Areas at the hospital.

D. Collect, properly package and return all potentially contaminated material generated at the hospital to the plant for disposal.

6.2.8 If no RPTs have been dispatched to the definitive care center by the time the helicopter departs, obtain transportation and proceed immediately to the Definitive Care Center. Prior to departure, instruct local hospital personnel to standby within the ER area until additional Radiation Protection personnel arrives.

6.2.9 Upon arrival at the definitive care center, proceed immediately to the ER designated to handle contaminated patients and determine if any Nuclear Medical Technicians (NMT) have been alerted or are present. Assess Radiation Protection resources and proceed as follows:

A. If you are the only RPT/NMT present and the patient has not arrived in the ER, obtain survey instruments and proceed immediately to the helipad along the pre-designated travel route used for patient transfer.

B. If you are the only RPT/NMT present and the patient has arrived in the ER, don protective clothing and dosimetry, obtain survey instruments and proceed into the Controlled Area to assist in the ER. Refer to Procedure A.5-500.

C. If more than one RPT/NMT is available, assign one to proceed to the helipad to cover patient arrival, transfer and helicopter survey and decon. Assign another to do PCs, dosimetry and assist in the ER Controlled Area.

6.2.10 Upon arrival at the helipad, perform the following:

A. Assist with (or confirm) the helicopter is properly posted and the helipad is controlled until properly surveyed and cleared.

B. If observing patient unloading, advise the helicopter and hospital staff on contamination control methods during the unloading process.

C. Instruct the pilot to close the helicopter doors and post the helicopter as a CONTROLLED AREA using signs and rope obtained from the helicopter hangar emergency equipment cabinet.

D. If present during patient transfer to the ER, follow immediately behind the transfer cart and take smears of the travel path enroute. Advise personnel on contamination control methods during the transfer.

E. Provide instructions to hospital security on access restrictions to the Controlled Area in the helipad and hangar area.

6.2.11 Upon arrival of the helicopter crew in the ER, direct them to standby in the ER area until surveyed and released. When RPT/NMT resources are available, clear the helicopter crew and transfer cart as follows:

A. Assist the crew with doffing protective clothing.

B. Perform a whole body frisk of each individual. Release personnel if uncontaminated.

C. Instruct any contaminated personnel to standby until decontaminated and unconditionally released.

D. Perform a smear and frisk survey of the cart used for patient transfer from the helipad to the ER. Release if uncontaminated or decon and release when time permits.

6.2.12 Instruct helicopter crew members to return their dosimetry. Record individual DRD OUT readings on Form 5790-100-02 used for dosimetry issuance. Retain TLDs and return to the plant for processing.

6.2.13 Upon completion of patient unloading, survey, decon (if necessary) and release the helicopter in accordance with Section 6.3 of this procedure.

6.3 Transfer Vehicle or Helicopter Monitoring and Decontamination

6.3.1 Prior to entering and surveying the vehicle (helicopter), don protective clothing appropriate for anticipated conditions.

6.3.2 Initiate Form 5790-200-01 (EMERGENCY VEHICLE SURVEY FORM) and document the location of all surveys performed.

6.3.3 Perform a loose surface contamination survey of the vehicle/helicopter interior as follows:

A. smear the internal surfaces including walls, seats and floor;

B. smear any equipment that was used for transport of patient (i.e., gurney, etc.);

C. smear suspect areas which have a high probability of being cross-contaminated including, door handles, equipment handles, etc.;

D. smear suspect surfaces in the driver/pilot compartment (i.e., steering wheel, floor, etc.);

E. label each smear with the location (in vehicle) and vehicle number;

6.3.4 Perform a preliminary analysis by using a Count Rate Meter with pancake probe in a low background area. Record results on Form 5790-300-01 (HOSPITAL SURVEY RESULTS LOG).

6.3.5 Bag and retain the samples for future analysis at the plant.

6.3.6 Upon completion of the smear survey, remove any protective covering used. Bag and properly control all contaminated materials.

6.3.7 Perform a fixed contamination survey of the vehicle internal surfaces using a Count Rate Meter with a pancake probe as follows.

A. Frisk suspect areas (i.e., seats, straps, and any irregular surfaces).

B. Frisk any equipment used for transport of the patient (i.e., gurney wheels, etc.).

C. Record results on Form 5790-300-01.

6.3.8 Coordinate the decontamination of any contaminated areas identified during the initial surveys using supplies obtained from hospital housekeeping.

6.3.9 When survey results verify the vehicle is uncontaminated, release the vehicle back to service.

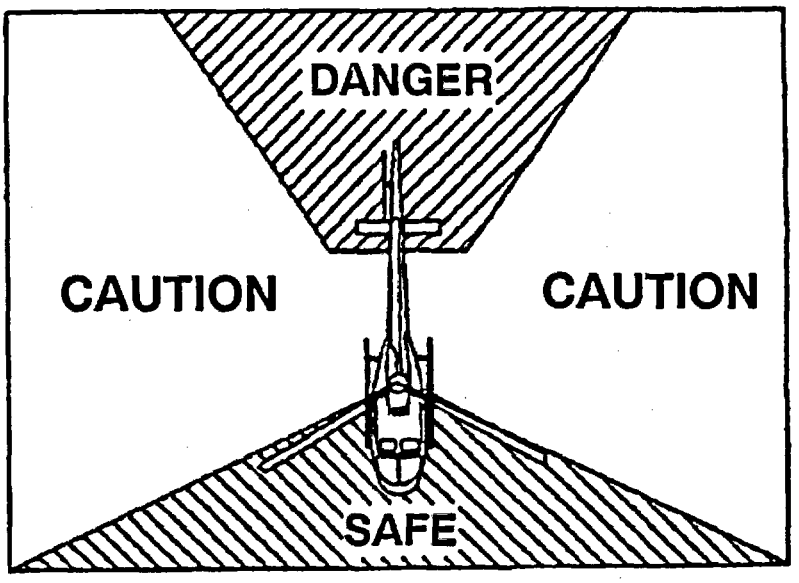
6.3.10 Bag and retain all waste material generated during vehicle decontamination. Return the materials to the plant for proper disposal.

6.3.11 Upon return to the plant, document and analyze the smears using a smear counting system at Access Control. Document the results of all surveys on appropriate Radiation Protection forms and submit for RPC review.

7.0 FIGURES

FIGURE

7.1 Helicopter Safety Rules



HELICOPTER SAFETY RULES

1) IDENTIFY A LANDING AREA: A 60-FOOT BY 60-FOOT AREA CLEAR OF WIRES, TREES, EMERGENCY VEHICLES, ANTENNAS AND LOOSE DEBRIS.

2) SECURE THE LANDING SITE TO PREVENT UNAUTHORIZED PERSONS FROM APPROACHING THE HELICOPTER.

3) STAND CLEAR OF LANDING AREA WHEN HELICOPTER IS APPROACHING OR TAKING OFF.

4) APPROACH AND LEAVE HELICOPTER IN PILOT'S FIELD OF VISION (TO AVOID TAIL ROTOR).

5) APPROACH ONLY AFTER BEING SIGNALLED BY CREW, APPROACHING IN A CROUCHED POSITION.

6) NEVER CARRY EQUIPMENT UPRIGHT OR OVER SHOULDER.

7) NO SMOKING WITHIN 60 FEET OF THE HELICOPTER.

FIGURE

7.2 Forms Utilized in this Procedure

1. 5790-100-02 Dosimetry Issuance Form
2. 5790-100-01 Personnel Survey Form
3. 5790-200-01 Emergency Vehicle Survey Form
4. 5790-300-01 Hospital Survey Results Log

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1.0 PURPOSE

The purpose of this procedure is to provide instruction and guidance for the handling and treatment of contaminated patients at the definitive care center (North Memorial or St. Paul Regions Hospitals). In addition, this procedure provides instructions for the surveying and decontamination of the hospital Trauma Center and general areas that may become contaminated.

2.0 APPLICABILITY

2.1 An incident has occurred at the MNGP or PINGP resulting in the transport of an injured, contaminated person (or persons) to the North Memorial or St. Paul Regions Hospitals.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 The Ambulance Attendants (or Helicopter Crew) are responsible for:

3.1.1 Patient handling, care and transfer to the Definitive Care Hospital.

3.2 Radiation Protection Technicians (RPT) are responsible for:

3.2.1 Radiological monitoring and radiological controls, at the Definitive Care Center.

3.2.2 Personnel and vehicle decontamination.

3.2.3 Hospital staff dosimetry issuance processing and contaminated waste control.

3.3 Nuclear Medical Technicians (NMT) are responsible for:

3.3.1 Radiological monitoring and control (supplement Plant Radiation Protection).

3.3.2 Assist Plant Radiation Protection, as necessary.

3.4 The Hospital Emergency Room Staff is responsible for:

3.4.1 Patient care and treatment.

3.4.2 Hospital Emergency Room setup for contamination control measures.

3.4.3 Issuance of dosimetry to attending hospital ER staff.

3.4.4 Decontamination of the patient.

4.0 DISCUSSION

4.1 Summary

This procedure provides instructions for Plant RPT at the Definitive Care Center in response to an incident involving a contaminated, injured person (or persons).

In the event of a casualty originating at the Monticello Nuclear Plant, a RPT will accompany the patient to the definitive care center if the patient is transferred by ambulance. If the patient is transferred by helicopter or if the patient originated at the Prairie Island plant a RPT will not accompany the patient in the vehicle. Instead, the RPT/NMT will arrive separately before or after patient arrival.

Upon arrival at the hospital, the RPT/NMTs are responsible to accompany the patient in the Trauma Center (Emergency Room) and advise the attending physician and nursing staff in matters relating to radiation protection and personnel decontamination. In addition, they are responsible for the Controlled Area, surveying and decontamination of the transfer vehicle (helicopter) and any hospital areas affected by the incident.

This procedure consists of five sections. Section 6.1 contains the immediate actions to be performed by a RPT/NMT upon initial arrival at the definitive care center. Section 6.2 provides instructions for the RPT that accompanies the patient if transferred in an ambulance (from MBLH). Section 6.3 provides instructions for the RPT/NMT assigned to meet the transfer vehicle, attend patient transfer within the care center and assist the ER staff outside the Controlled Area. Section 6.5 provides instructions for the surveying, decontamination and clearing of the transfer vehicle (or helicopter), helipad and hangar if used, emergency room and other hospital areas that may have become contaminated during the event.

5.0 PRECAUTIONS

5.1 In all cases the health and safety of the injured person(s) is the primary concern. Prompt medical treatment takes precedence over radiological decontamination, radiological monitoring or contamination control methods when serious injury involving the potential loss of life or limb has occurred.

5.2 RPTs will be required to show a company ID upon arrival at the hospital.

6.0 INSTRUCTIONS

6.1 Immediate RPT/NMT Actions

6.1.1 Initiate Form 5790-500-01 (NORTH MEMORIAL HOSPITAL RADIOLOGICAL EMERGENCY CHECKLIST).

6.1.2 If accompanying the patient in the ambulance (i.e., ground transfer from MBLH), go directly to Section 6.2 of this procedure. If arriving separate from the patient, proceed to 6.1.3.

6.1.3 Proceed to the Trauma Center (Stabilization Room) and determine if the patient has arrived and the mode of transportation used (i.e., ground ambulance or helicopter).

6.1.4 Determine if any other RPTs or NMTs have been alerted or are present. Assess Radiation Protection resources and proceed as follows:

A. If you are the only Radiation Protection person present and the patient has arrived in the ER, don protective clothing and dosimetry, obtain survey instruments and proceed into the Controlled Area to assist in the ER. Refer to Section 6.3 for instructions.

B. If you are the only Radiation Protection person present and the patient has not arrived in the ER, obtain survey instruments and proceed immediately to the ambulance receiving area or heli-pad along the predesignated travel route used for patient transfer. Refer to Section 6.4 of the procedure for the respective assignments.

C. If more than one Radiation Protection personnel are available, assign one to proceed to ambulance receiving or the helipad to cover patient arrival and transfer. Assign another to don PCs, dosimetry and assist in the ER Controlled Area. Refer to the instructions in Sections 6.3 and 6.4 for respective assignments.

6.1.5 If additional Radiation Protection resources are necessary, contact the MNGP Shift Manager and/or hospital nursing supervisor and request additional support.

6.1.6 When sufficient Radiation Protection personnel are available and time permits, perform surveys of the vehicle (ambulance), decontaminate (if necessary) and release back to service in accordance with Procedure A.5-400 (CONTAMINATED PATIENT TRANSFER).

6.1.7 When medical treatment is complete and the Controlled Area is no longer required, survey, decontaminate and clear the affected areas of the hospital in accordance with Section 6.5 of this procedure.

6.2 Instructions for the Transfer Vehicle (RPT) Escort

6.2.1 Upon arrival at the hospital observe the ambulance unloading process and:

A. Advise and assist ambulance personnel with contamination control during the unloading process.

B. Instruct ambulance personnel to park the ambulance, close all doors and windows (lock doors if possible) and post the ambulance as a CONTROLLED AREA using signs and rope obtained from the hospital emergency locker (refer to FIGURE 7.1).

C. Instruct the ambulance crew to standby near the Emergency Room, within the posted area, after delivering the patient until properly monitored and released (i.e., whole body frisk).

D. Instruct ambulance personnel to keep ambulance gurney used for patient transfer within the posted area. The potentially contaminated gurney may be placed back in the ambulance unit if obstructing the ER area.

6.2.2 Proceed immediately to the Trauma Center with the patient. Ensure any completed radiological survey forms are brought to the Trauma Center for reference in the decon process.

NOTE: The activities in 6.2.3 through 6.2.6 should be performed while transporting the patient from ambulance to the Trauma Center and should be done in a cursory sense. The second RPT reporting to the hospital is primarily responsible for activities outside the Controlled Area.

6.2.3 Ensure the Controlled Area of the hospital has been properly established including the following. Assist in area setup if not already done (refer to FIGURE 7.1 for area setup).

A. The area is clearly posted with rad-rope (ribbon), rad-tape and Contaminated Area postings.

B. A step-off pad is properly placed at the entrance to the Controlled Area.

6.2.4 Check and verify that hospital personnel attending the contaminated patient have proper dosimetry (TLD and 0-200 mRem Dosimeter). If dosimetry has not yet been issued, direct a member of the hospital staff to issue dosimetry to all personnel presently inside and entering the Controlled Area.

NOTE: Hospital personnel attending the patient should have proper dosimetry which is recorded on Form 5790-100-02 (DOSIMETRY ISSUANCE FORM). 0-200 mRem Direct Reading Dosimeters should be issued reading less than 50 mRem (i.e., 1/4 full scale). Dosimeters reading more than 50 mRem should be rezeroed prior issuance.

6.2.5 Obtain a Count Rate Meter, dose rate meter (RO-2 or equivalent) and smear papers for use in the Controlled Area from the RP Instrument Case.

6.2.6 Don appropriate protective clothing and dosimetry (if not donned for ambulance transport) and enter the Controlled Area.

6.2.7 Enter the ER and refer to Section 6.3 of this procedure for assisting the hospital staff with contamination control, patient surveys and decontamination.

6.3 **Controlled Area (Inside) RPT/NMT Instructions**

6.3.1 Ensure any completed radiological survey forms are delivered to the ER for reference during patient decontamination.

6.3.2 Check and verify that hospital personnel attending the contaminated patient have proper dosimetry (TLD and 0-200 mRem dosimeter). If dosimetry has not yet been issued, direct a member of the hospital staff to issue dosimetry to all ER personnel.

6.3.3 Don appropriate protective clothing and dosimetry (if not donned already) and enter the Emergency Room Controlled Area.

6.3.4 Obtain a Count Rate Meter, dose rate meter (RO-2 or equivalent) and smear papers for use in the ER from the emergency cabinet.

6.3.5 In the Emergency Room, perform the activities in Steps 6.3.7 through 6.3.15 as necessary or as requested by the attending physician or nursing staff.

NOTE: Medical treatment of the patient is the primary concern. If circumstances are such that medical implications make surveying and decon inadvisable, follow the direction of the attending physician.

6.3.6 Direct the Trauma Center staff to periodically check their dosimeters if dose rates are a concern.

6.3.7 During medical treatment and stabilization advise the hospital staff on contamination control methods (i.e., glove changes). Provide information requested by the staff regarding contamination levels and dose rates.

6.3.8 Survey all samples taken by the ER staff during medical treatment and stabilization to determine the presence of gross radioactivity. Ensure proper storage of all samples retained in the ER (i.e., storage of high activity samples in the lead container).

6.3.9 Survey all samples that must be removed from the Controlled Area for lab analysis (i.e., blood samples, etc.). Ensure proper contamination control techniques are utilized when transferring samples (X-ray film cartridges, etc.).

NOTE: When staffed, the RPT/NMT outside the Controlled Area is responsible for surveying all materials (samples, x-ray film cartridges, trash, etc.) removed from the Controlled Area.

6.3.10 Properly control (bag and label) all radioactive material (e.g., contaminated patient clothing, trash) within the ER. Employ ALARA techniques such as distance and shielding to minimize personnel exposures.

6.3.11 Assist hospital staff in moving necessary equipment (i.e., X-ray machines, etc.) into and out of the Controlled Area. Properly survey (smear and frisk) all materials to be removed from the area.

6.3.12 When the physician or nurses indicate patient decontamination may be performed, coordinate decontamination efforts as follows:

A. Using a Count Rate Meter, survey the patient and identify areas of contamination paying close attention to areas that indicate potential inhalation (i.e., nose and mouth);

B. Assist the ER staff with patient decontamination in accordance with hospital procedures.

C. Survey the area after each decontamination effort and record the results on Form 5790-100-01 (PERSONNEL SURVEY FORM).

D. Continue decontamination efforts until the patient is decontaminated or until available methods to remove the contamination have been exhausted.

NOTE: If decontamination efforts are unsuccessful, the patient may be admitted to the hospital (or released) provided adequate precautions are taken to prevent the spread of contamination.

6.3.13 Monitor the level of the container used to collect water used in decontamination. When full, replace the full container with an empty container from the emergency cabinet.

6.3.14 Advise hospital personnel on proper techniques for doffing protective clothing when exiting the Controlled Area. Perform a whole body frisk of all personnel exiting the Controlled Area.

6.3.15 Assist the ER staff in the "clean transfer" of the patient to an uncontaminated gurney for removal from the ER. Complete a survey of patient after "clean transfer" to confirm decontamination efforts.

6.3.16 Survey the area in accordance with Section 6.5.

6.3.17 Control and properly package all contaminated trash and material for transport to the plant for proper disposal.

6.4 **Hospital RPT/NMT Instructions (outside the Controlled Area)**

6.4.1 Proceed to the Trauma Center and determine mode of patient transport and the location of the ambulance (or helicopter) crew. If the crew is present proceed to 6.4.3. If the crew is not present (i.e., patient not yet arrived) proceed to 6.4.2.

6.4.2 Proceed to the ambulance receiving area or helicopter hangar and upon arrival perform the following:

A. Assist with (or confirm) the ambulance/helicopter is properly posted and the area is controlled until properly surveyed and cleared.

B. If observing patient unloading, advise the ambulance/helicopter crew on contamination control methods during the unloading process.

C. Instruct the driver/pilot to close the doors and post the ambulance/helicopter as a CONTROLLED AREA using signs and rope obtained from the Trauma Center or helicopter hangar emergency cabinet.

D. If present during patient transfer to the ER, follow immediately behind the transfer cart and take smears of the travel path enroute. Advise personnel on contamination control methods during the transfer.

E. Provide instructions to hospital security on access restrictions to the Controlled Area in the helipad and hangar area if helicopter transfer was performed.

6.4.3 Upon arrival of the ambulance/helicopter crew in the ER direct them to standby in the ER area until surveyed and released. When time permits clear the crew and transfer cart as follows:

A. Assist the crew with doffing protective clothing.

B. Perform a whole body frisk of each individual. Release personnel if uncontaminated.

C. Instruct any contaminated personnel to standby until decontaminated and unconditionally released.

D. Perform a smear and frisk survey of the cart used for patient transfer from the receiving area/helipad to the ER. Release if uncontaminated or decon and release when time permits.

6.4.4 Instruct ambulance/helicopter crew members to return their dosimetry. Record individual DRD OUT readings on Form 5790-100-02, used for dosimetry issuance. Retain TLDs and return to the plant for processing.

6.4.5 Obtain a Count Rate Meter, dose rate meter (RO-2 or equivalent) and smear papers from the emergency cabinet (refer to FIGURE 7.1 for cabinet location).

6.4.6 Station yourself at the step-off pad area and coordinate personnel and equipment movement into and out of the Controlled Area. Advise hospital personnel on radiological matters (i.e., protective clothing, floor decon, etc.).

6.4.7 Survey all samples that must be removed from the ER for lab analysis (i.e., blood samples, etc.). Ensure proper contamination control techniques are utilized when transferring samples (X-ray film cartridges, etc.) out of the Controlled Area.

6.4.8 Assist the ER staff in moving necessary equipment (i.e., X-ray machines, etc.) into and out of the Controlled Area. Properly survey (smear and frisk) all materials to be removed from the area.

6.4.9 Advise ER personnel on proper techniques for donning and doffing protective clothing when entering and exiting the Controlled Area. Perform a whole body frisk of all personnel exiting the Controlled Area.

6.4.10 As personnel exit the ER collect their TLD and dosimeter and retain for processing. Record all dosimeter data on Form 5790-100-02.

6.4.11 Assist the ER staff in the "clean transfer" of the patient to an uncontaminated gurney for removal from the ER.

6.4.12 Control and properly package all potentially contaminated trash and material for transport to the plant for proper disposal.

6.4.13 Collect and return all TLDs (issued at the hospital) to the plant for processing with the completed Form 5790-100-02.

NOTE: When the TLDs have been processed the results should be forwarded to the hospital Emergency Nursing Supervisor.

6.5 Hospital/Vehicle Survey and Decontamination

6.5.1 Upon completion of medical treatment and after the patient has been transferred out of the Controlled Area, ensure all established Controlled Areas are posted and properly controlled until surveyed and cleared.

6.5.2 During the survey and clearing process priority should be given to the emergency vehicle used for contaminated patient transfer and areas of the hospital used by the general public. Surveying, decontamination and clearing of the Controlled Area inside the Trauma Center is of lowest priority if RPT/NMT resources are limited.

6.5.3 Survey, decontaminate (if necessary) and release the vehicle or helicopter used for contaminated patient transfer IAW Procedure A.5-400 (CONTAMINATED PATIENT TRANSFER).

6.5.4 Survey and clear any Controlled Areas established including the ambulance receiving area, helicopter hangar, travel routes or Trauma Center.

A. Label each smear with the location, time, date and other pertinent information. Indicate the location on a NORTH MEMORIAL FLOOR PLAN, FIGURE 7.1 and/or FIGURE 7.2.

B. Perform a preliminary analysis by counting each smear using a Count Rate Meter with GM pancake probe in a low background area.

C. Record survey results on Form 5790-300-01 (HOSPITAL SURVEY RESULTS LOG).

6.5.5 Coordinate the decontamination of any contaminated areas or equipment identified during the area surveys as follows:

A. Request the assistance of hospital Housekeeping department or obtain Nuclear Plant Helper support from the plant.

6.5.6 Resurvey areas, equipment after decontamination is complete.

6.5.7 Return all smears to the plant for analysis and complete documentation in accordance with applicable RPPs and record the survey results on Form 5790-300-01.

6.5.8 Properly bag and label all radioactive trash generated during the event.

6.5.9 Coordinate the transfer of any trash and materials used during the event including decontamination materials to the MNGP for proper disposal.

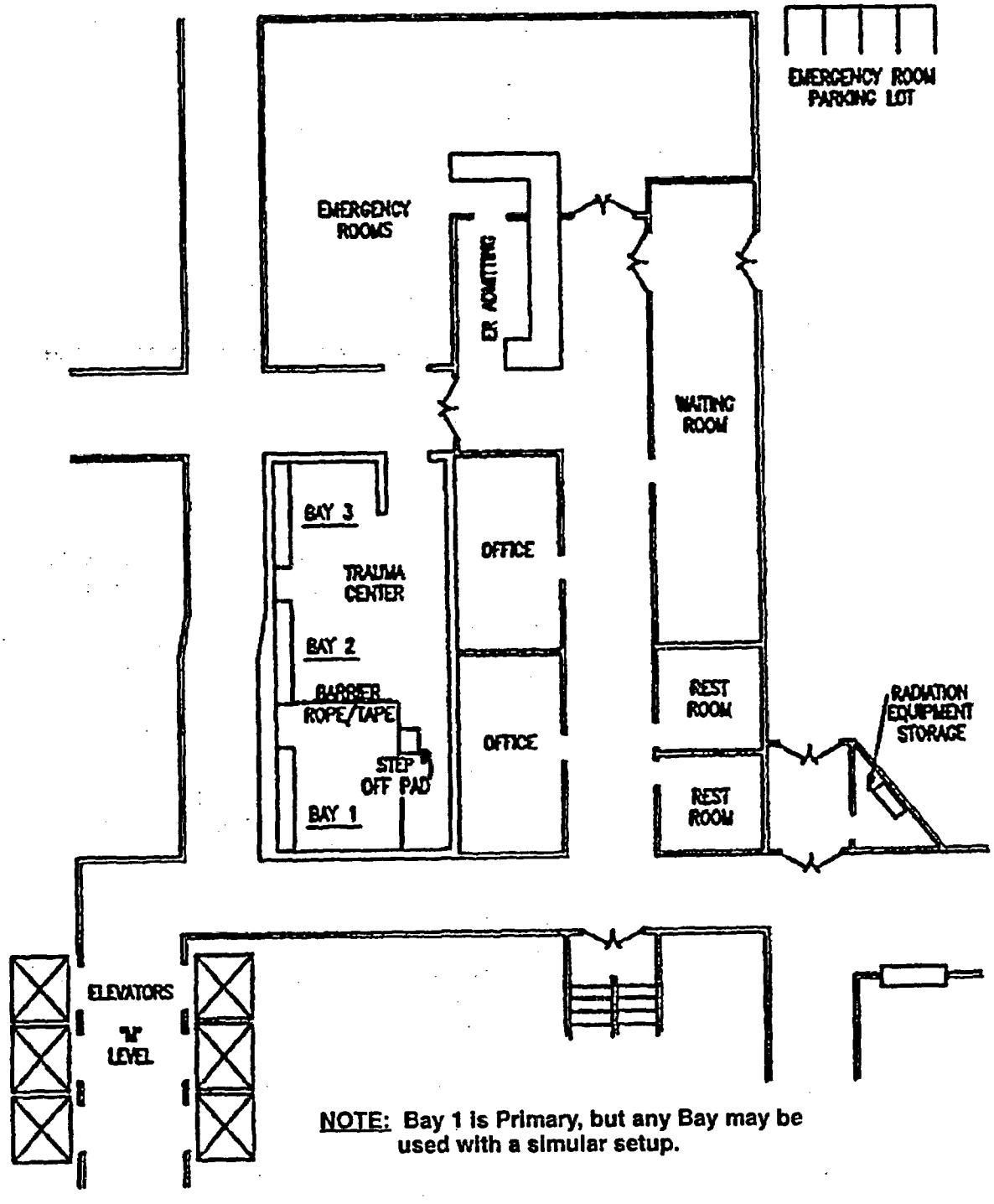
6.5.10 Coordinate the disposal of any contaminated water used for patient or hospital decontamination.

6.5.11 Coordinate the restocking of emergency supplies in the Trauma Center and Helicopter Hangar emergency equipment lockers.

7.0 FIGURES

FIGURE

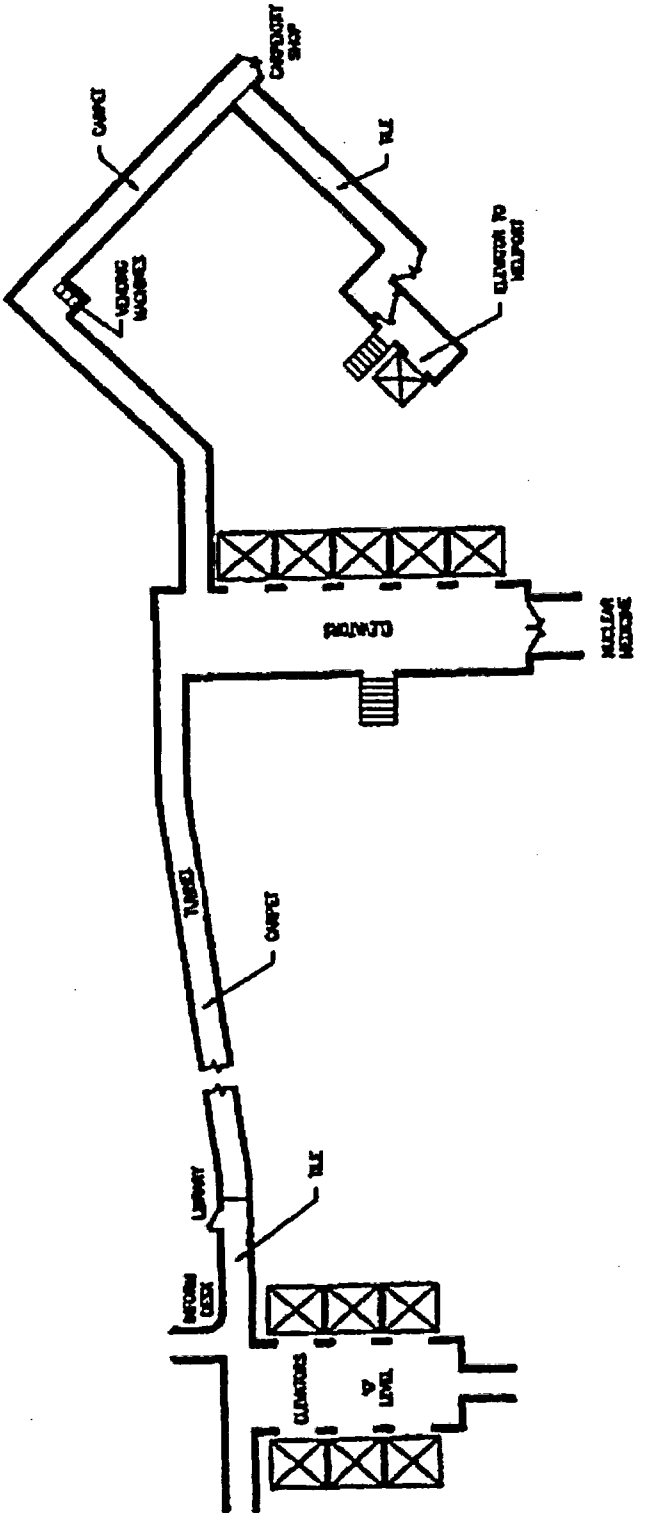
7.1 North Memorial Hospital Controlled Area



NOTE: Bay 1 is Primary, but any Bay may be used with a simular setup.

FIGURE

7.2 North Memorial Hospital Helipport Transfer Route



l/mab

FIGURE

7.3 Forms Utilized in this Procedure

1. 5790-500-01 North Memorial Hospital Radiological emergency Checklist
2. 5790-100-02 Dosimetry Issuance Form
3. 5790-100-01 Personnel Survey Form
4. 5790-300-01 Hospital Survey Results Log
5. 5790-200-01 Emergency Vehicle Survey Form