



September 9, 2003

L-MT-03-069  
10 CFR 50, Appendix E  
Section V

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Monticello Nuclear Generating Plant  
Docket 50-263  
License No. DPR-22

Emergency Plan Implementing Procedure

Furnished with this letter is a revision to the Monticello Nuclear Generating Plant Emergency Plan Implementing Procedures. The following procedure is revised:

<u>Procedure</u>	<u>Procedure Title</u>	<u>Revision</u>
A.5-300	Casualty Care at the Local Hospital	4

Please post changes in your copy of the Monticello Nuclear Generating Plant Emergency Plan Implementing Procedures. The superseded procedure should be destroyed.

This revision does not reduce the effectiveness of the Monticello Nuclear Generating Plant Emergency Plan.

Please contact John Fields at (763) 295-1663 if you require further information.

Thomas J. Palmisano  
Site Vice President, Monticello Nuclear Generating Plant  
Nuclear Management Company, LLC

- cc: Regional Administrator, Region III, USNRC (with two copies of enclosure)  
Project Manager, Monticello, USNRC (w/o enclosure)  
Resident Inspector, Monticello, USNRC (w/o enclosure, EPIP distribution by Monticello Document Control)  
Minnesota Dept. of Commerce (w/o enclosure)

Enclosure

**EMERGENCY PLAN IMPLEMENTING PROCEDURE - TABLE OF CONTENTS**

<u>SECTION</u>		<u>PAGE</u>
1.0	PURPOSE .....	2
2.0	APPLICABILITY .....	2
3.0	ORGANIZATION AND RESPONSIBILITIES .....	2
4.0	DISCUSSION .....	2
5.0	PRECAUTIONS .....	2
6.0	INSTRUCTIONS .....	3
6.1	Instructions for the Ambulance Escort (Controlled Area RPT) .....	3
6.2	Instructions for the Hospital RPT (Outside Controlled Area) .....	5
6.3	Hospital/Vehicle Survey and Decontamination .....	7
7.0	FIGURES .....	9
7.1	Forms Utilized in this Procedure .....	9

\*This is a major rewrite, therefore, no sidelines are required.

Prepared By: <i>[Signature]</i>	Reviewed By: <i>[Signature]</i>
OC Review Req'd. <b>YES</b>	OC Meeting Number: <b>2376A</b>
Approved By: <i>[Signature]</i>	Date: <b>8/13/03</b>

FOR ADMINISTRATIVE USE ONLY			
This revision incorporates Volume F Memos: <i>None</i>			
3087 (DOCUMENT CHANGE, HOLD, AND COMMENT FORM) incorporated: <b>01-2909, 02-1355</b>			
Resp Supv: EP	Assoc Ref: A.5	SR: N	Freq: 1 yrs
ARMS: A.5-300	Doc Type: 1060	Admin Initials: <i>[Signature]</i>	Date: <b>8/13/03</b>

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		A.5-300
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	Revision 4*
		Page 2 of 9

## 1.0 PURPOSE

The purpose of this procedure is to provide instructions and guidance for the handling and treatment of contaminated, injured person(s) at the local hospital (Monticello-Big Lake Hospital). In addition, this procedure provides instruction for the surveying and decontamination of the hospital Emergency Room and general areas that may have become contaminated during such an event.

## 2.0 APPLICABILITY

2.1 An accident has occurred at the MNGP resulting in the transport of an injured, contaminated person (or persons) to the Monticello-Big Lake Community Hospital for medical treatment.

## 3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 Radiation Protection Technicians (RPT) are responsible for:

3.1.1 Responsible for radiological monitoring, personnel and vehicle decontamination, contamination control, hospital staff dosimetry processing, and contaminated waste control.

3.2 The Hospital Emergency Room Staff are responsible for:

3.2.1 Patient care and treatment.

3.2.2 Hospital emergency room set-up and dosimetry issuance to attending hospital personnel.

## 4.0 DISCUSSION

4.1 This procedure provides instructions for MNGP Radiation Protection Technician(s) (RPT) at the Monticello-Big Lake Hospital in response to an incident involving a contaminated, injured person (or persons). In the event of such an incident, one RPT will accompany the injured person to the hospital in the emergency vehicle. Upon arrival at the hospital, the RPT should accompany the injured person into the Emergency Room (ER) and advise the attending physician and nursing staff in matters relating to radiation protection and personnel decontamination. In accordance with Procedure A.5-100 (ON-SITE MEDICAL EMERGENCIES), a second RPT should be dispatched to the hospital and, upon arrival, should remain outside the Controlled Area (posted area) and 1) coordinate the ingress and egress of hospital personnel into the area 2) control and survey the vehicle used for transport and 3) control all radioactive material generated.

## 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 control methods when serious injury involving the potential loss of life or limb has occurred.

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		A.5-300-
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	Revision 4*
		Page 3 of 9

## 6.0 INSTRUCTIONS

### 6.1 Instructions for the Ambulance Escort (Controlled Area RPT)

- 6.1.1 Upon arrival at the hospital observe the ambulance unloading process and
- Advise and assist ambulance personnel with contamination control during the unloading process.
  - Instruct ambulance personnel to close all ambulance doors and windows and post the ambulance.
  - Instruct the ambulance crew to remain within the posted area, after delivering the patient, until properly monitored and released (i.e., whole body frisk).
  - 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 until the ambulance and gurney can be properly surveyed.
- 6.1.2 Ensure any completed radiological survey forms are delivered to the ER for reference during patient decontamination.
- 6.1.3 Verify the Controlled Area has been properly established. If not, provide instructions to hospital personnel on the establishment of a Controlled Area after the patient has been transferred into the Emergency Room.
- 6.1.4 Check and verify that hospital personnel attending the contaminated patient have proper dosimetry (TLD and 0-200 millirem dosimeter). If dosimetry has not yet been issued, direct a member of the hospital staff to issue dosimetry to all ER personnel.
- Dosimetry issuance should be recorded on Form 5790-100-02 (DOSIMETRY ISSUANCE FORM).
  - Dosimeters, when issued, should be reading less than 25% full scale (50 millirem).
  - Rezero an individuals dosimeter if it reaches 75% full scale (150 millirem).
- 6.1.5 As required, obtain a count rate meter, dose rate meter and smear papers for use in the ER from the emergency cabinet.
- 6.1.6 Don appropriate protective clothing and dosimetry (if not donned for ambulance transport) and enter the Emergency Room.

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		<b>A.5-300</b>
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	<b>Revision 4*</b>
		<b>Page 4 of 9</b>

- 6.1.7 Direct the ER staff to periodically check their direct reading dosimeters if dose rates are a concern.
- 6.1.8 During medical treatment and stabilization, advise the ER staff on contamination control methods (i.e., glove changes). Provide information required by the ER staff regarding contamination levels and dose rates. Provide radiological information in units of CPM or millirem per hour.
- 6.1.9 If, during medical treatment, the patient must be moved immediately to an Operating Room assist ER personnel with contamination control during patient transfer.
- 6.1.10 Direct ER staff to obtain samples of contaminated areas of the victim. If victim has a facial wound, have ER staff sample victim's nose, mouth and/or ears as appropriate.
- 3.1.11 Survey all samples taken by the ER staff during medical treatment and stabilization to determine the presence of radioactivity. Ensure proper storage of all samples retained in the ER (i.e., storage of high activity samples in the lead container).
- 6.1.12 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.

**NOTE: When staffed, the RPT outside the Controlled Area is responsible for surveying all materials (samples, x-ray film cartridges, trash, etc.) removed from the Controlled Area.**

- 6.1.13 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.
- 6.1.14 When the ER staff indicates 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. Decontaminate areas of higher contamination first, utilizing plastic coverings, etc., to prevent cross-contamination of other areas when rinsing;
  - C. Assist the ER staff as necessary in patient decontamination.
  - D. Survey the area after each decontamination effort and record the results on Form 5790-100-01 (PERSONNEL SURVEY FORM);

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		<b>A.5-300</b>
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	<b>Revision 4*</b>
		<b>Page 5 of 9</b>

E. Continue decontamination efforts until the patient is decontaminated or until available methods to remove the contamination have been exhausted.

6.1.15 Assist the ER staff in the "clean transfer" of the patient to an uncontaminated gurney for removal from the ER.

6.1.16 Advise ER 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.

6.1.17 Control and package all potentially contaminated trash and material for transport to the plant for proper disposal.

**6.2 Instructions for the Hospital RPT (Outside Controlled Area)**

6.2.1 Upon arrival at the hospital, contact the Emergency Room RPT and assume responsibility for coordination of activities outside the Controlled Area.

6.2.2 Verify the Controlled Area is roped-off and posted as a CONTAMINATED AREA, TLD and DOSIMETER required for entry (refer to Hospital Assistance Plan for area set up):

6.2.3 Obtain instruments and supplies as necessary from the emergency cabinet.

6.2.4 Check the vehicle used for patient transport to ensure proper radiological postings and access to the vehicle is limited. Survey (smear and frisk), decontaminate if necessary, and release the vehicle for unrestricted use when time allows.

6.2.5 If the ambulance crew has not been monitored out of the Controlled Area assist them in exiting the area as follows:

A. Provide instructions for doffing protective clothing.

B. Perform a whole body frisk of each individual as they exit the Controlled Area.

C. Decontaminate any ambulance crew members that are found to be contaminated.

D. Obtain, read and record the results of any dosimetry issued to ambulance personnel. Record the dosimeter OUT readings on Form 5790-100-02.

E. Release ambulance personnel when monitoring and dosimetry processing is complete.

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		<b>A.5-300</b>
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	Revision 4*
		Page 6 of 9

- 6.2.6 Once the patient is in the Emergency Room coordinate the surveying and clearing of affected hospital areas outside the Emergency Room as follows:
- A. Survey the hallway and ambulance receiving area for contamination. If contaminated, leave the CONTAMINATED AREA posting and decontaminate when resources are available. If the areas are uncontaminated remove the posting (ropes, signs, and step-off pad) and clear the area for use.
  - B. Place a step-off pad at the area immediately outside the Emergency Room.
  - C. Ensure the Controlled Area immediately outside the ER and the ER are properly posted as a CONTAMINATED AREA and CONTROLLED AREA, TLD & DOSIMETER REQUIRED FOR ENTRY.
  - D. Contain and properly bag all contaminated material for return to the plant and proper disposal.
- 6.2.7 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.).
- 6.2.8 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.
- 6.2.9 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.
- 6.2.10 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.
- 6.2.11 As personnel exit the ER collect their TLD and dosimeter and retain for processing. Record all dosimeter data on Form 5790-100-02.
- 6.2.12 Assist the ER staff in the "clean transfer" of the patient to an uncontaminated gurney for removal from the ER.
- 6.2.13 If the hospital staff determines the patient should be transferred to North Memorial Hospital (or Regions in St. Paul) and the patient will be contaminated when transferred, perform the following:
- A. If necessary, contact the RPC or Control Room Supervisor at the plant and request additional radiation protection assistance.

**TITLE:****CASUALTY CARE AT THE LOCAL  
HOSPITAL**

Revision 4\*

Page 7 of 9

- B. Ensure a copy of the most recently completed Form 5790-100-01 on the patient is transferred with the patient or telecopied to the receiving hospital.
- C. Instruct ambulance or helicopter personnel on contamination control methods to be used during the transfer (i.e., wrap patient in sheet, etc.).
- D. Refer to plant Medical Procedure A.5-400 (CONTAMINATED PATIENT TRANSFER) and coordinate the radiological aspects of the transfer.

6.2.14 Collect and return all TLDs (issued at the hospital or to ambulance personnel) to the plant for processing with the completed Form 5790-100-02.

### **6.3 Hospital/Vehicle Survey and Decontamination**

- 6.3.1 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.
- 6.3.2 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.
- 6.3.3 Survey and clear any Controlled Area(s) established including the ambulance receiving area, travel routes or Emergency Room as follows:
  - A. Prior to entering and surveying the area, don protective clothing appropriate for anticipated conditions.
  - B. Perform a loose surface contamination survey of the area using cloth smears.
  - C. Smear all exposed surfaces within the area, including floors, walls, cabinets, door handles, etc.
  - D. Smear any equipment that was used for transport of patient (i.e., gurney, etc.) that is within the area.
  - E. Label each smear with the location, time, date and other pertinent information. Indicate the survey location on a MBLH CONTROLLED AREA FLOOR PLAN and record results on Form 5790-300-01 (HOSPITAL SURVEY RESULTS LOG).
  - F. Perform a preliminary analysis by counting each smear using a count rate meter with pancake probe in a low background area.

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		A.5-300
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	Revision 4*
		Page 8 of 9

- G. Bag and retain the smears for analysis at the plant.
  - H. Perform a fixed contamination survey (frisk) of the irregular surfaces within the area (i.e., straps, cushions) using a count rate meter with a pancake probe. Record results on Form 5790-300-01.
- 6.3.4 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.
  - B. Survey the floor and decontaminate (if necessary) .
  - C. Using paper or cloth towels (with a typical hospital disinfectant) wipe smooth surfaces such as doors, door handles, gurney, etc.
  - D. Properly control (bag, label and isolate) all materials used for hospital decontamination.
- 6.3.5 Resurvey areas, equipment after decontamination is complete.
- 6.3.6 Return all smears to the plant for analysis and complete documentation in accordance with applicable RPP(s). Record results on Form 5790-300-01.
- 6.3.7 Properly bag and label all radioactive trash generated during the event.
- 6.3.8 Coordinate the transfer of any trash and materials generated during the event including decontamination materials (i.e., mop heads, rags, paper, used protective clothing, etc.) to the MNGP for proper disposal.
- 6.3.9 Coordinate the disposal of any contaminated water used for patient or hospital decontamination as follows:
- A. Collect any potentially contaminated water used for patient or hospital decontamination.
  - B. Return the full (or partially full) containers, used for patient decontamination, to the plant for disposal.
- 6.3.10 Coordinate the restocking of emergency supplies in the hospital emergency equipment locker.

<b>MONTICELLO NUCLEAR GENERATING PLANT</b>		<b>A.5-300</b>
<b>TITLE:</b>	<b>CASUALTY CARE AT THE LOCAL HOSPITAL</b>	<b>Revision 4*</b>
	<b>HOSPITAL</b>	<b>Page 9 of 9</b>

**7.0 FIGURES**

**7.1 Forms Utilized in this Procedure**

1. 5790-100-02 (DOSIMETRY ISSUANCE FORM)
2. 5790-100-01 (PERSONNEL SURVEY FORM)
3. 5790-300-01 (HOSPITAL SURVEY RESULTS LOG)