

NRC 2001-021

April 19, 2001

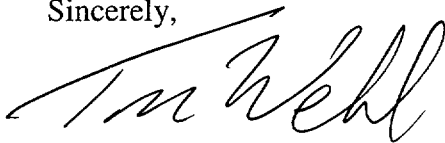
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Ladies/Gentlemen:

DOCKETS 50-266 & 50-301
EMERGENCY PLAN IMPLEMENTING PROCEDURE REVISIONS
POINT BEACH NUCLEAR PLANT, UNITS 1 & 2

Enclosed are copies of revised procedures to the Point Beach Nuclear Plant Emergency Plan Implementing Procedures. The revised procedures dated March 20, 2001, should be filed in your copy of the manual in accordance with the attached instructions.

Sincerely,



Thomas J. Webb
Licensing Director

Enclosures

cc: NRC Resident Inspector (w/o/e)

A045

The following changes have been made to the **Emergency Plan Implementing Procedures** Manual. Please **REMOVE** and **DESTROY** the previous revision(s) and replace them **IMMEDIATELY** with the current revision(s) that are attached.

1. EPIP Index, Revision 71.
2. EPIP 2.1, Notifications - ERO, State & Counties, and NRC, Revision 21.
3. EPIP 5.2, Radioiodine Blocking and Thyroid Dose Accounting, Revision 13.
4. EPIP 11.2, Medical Emergency, Revision 15.

POINT BEACH NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURES

EPIP INDEX
Revision 71
March 20, 2001

INDEX

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NAMES AND
TELEPHONE NUMBERS
DELETED

(T - Temporary Change)

C = Continuous Use
R = Reference Use
I = Information Use

POINT BEACH NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURES

EPIP INDEX
Revision 71
March 20, 2001

INDEX

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EPIP 2.1

NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

DOCUMENT TYPE: Technical

CLASSIFICATION: NNSR

REVISION: 21

EFFECTIVE DATE: March 20, 2001

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER: Emergency Preparedness Supervisor

OWNER GROUP: Emergency Preparedness

NAMES AND
TELEPHONE NUMBERS
DELETED

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NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

1.0 PURPOSE

This procedure is to provide guidance for making initial and subsequent notifications of a classified emergency to members of the Point Beach Nuclear Plant Emergency Response Organization (ERO), State of Wisconsin, Manitowoc County, Kewaunee County, KNPP and the Nuclear Regulatory Commission.

2.0 PREREQUISITES

2.1 Responsibilities

2.1.1 Duty Shift Superintendent (DSS) has the ultimate responsibility to complete notifications per this procedure until a formal turnover to the Emergency Director has been conducted.

2.1.2 **IF** available to assist with this procedure,
THEN the DSS may assign these tasks to:

- Security Shift Commander (SSC)
- Operating Supervisor(s) (OS)
- Shift Technical Advisor (STA)

2.1.3 State and County Communicator shall assume notifications to the State and Counties upon activation of the Emergency Operations Facility (EOF).

2.1.4 ENS Communicator shall assume notifications to the NRC upon activation of the Technical Support Center (TSC).

2.2 Equipment

2.2.1 Notification of the Emergency Response Organization

- Point Beach Automated Notification System (primary means)
- Alpha-numeric paging accessed via telephone (backup means)
- Alpha-numeric paging system accessed via TSO (backup means)
- Manual Call Tree (backup means)

2.2.2 Notification of the State and County Emergency Managements

- Two-Digit Dial Select Telephone
- Commercial Telephones (PBX, GTE, Microwave)

2.2.3 Notification of the NRC

- Federal Telecommunications System (FTS) Emergency Notification System (ENS)
- Commercial Telephones (PBX, GTE, Microwave)

3.0 PRECAUTIONS AND LIMITATIONS

- 3.1 Completion of this procedure shall not prevent the operators from bringing the plant to a safe condition to protect the health and safety of the general public.
- 3.2 The State of Wisconsin Emergency Management, Manitowoc County Emergency Management, and Kewaunee County Emergency Government shall be notified **within 15-minutes of event classification**.
- 3.3 The NRC shall be notified **immediately following the state and county notifications, not to exceed one hour from declaration** of a classified emergency.
- 3.4 TSO knowledge is required for IBM mainframe access to the paging system.
- 3.5 Only approved personnel may activate the Point Beach Automated Notification System.

4.0 INITIAL CONDITIONS

- 4.1 An emergency has been declared or terminated.
- 4.2 A change from one emergency classification to another has occurred.
- 4.3 Further degradation of the level of safety of the plant, major changes in equipment or reactor status, or other major changes **NOT** involving a change in emergency classification have occurred.

5.0 PROCEDURE

NOTE: The notifications of the Emergency Response Organization, State and Counties, KNPP, and Nuclear Regulatory Commission should be completed simultaneously if possible.

5.1 Notification of Emergency Response Organization (ERO)

NOTE: Step 5.1.2, Step 5.1.3, or Step 5.1.4, respectively, shall be performed only if the Point Beach Automated Notification System is unavailable.

NOTE: If ERO already activated by an Alert or Site Emergency Classification, do not repeat this section.

5.1.1 PBNP Automated Notification System (primary means)

- a. Determine the information desired to be sent to the Emergency Response Organization using Attachment A. Record the information at the bottom of Attachment A.
- b. From any on-site telephone, dial to access the PBNP Automated Notification System and follow the voice prompt instructions.
- c. When prompted, enter the scenario activation password "111222333" using the keypad on the telephone.
- d. When prompted, enter the 3-digit SCENARIO number from Attachment A.
- e. Press "3" to start the scenario.
- f. When the PBNP Automated Notification System says, "The scenario is building," press the "#" key, listen to "good-bye," and then hang up. Other menu options are available at this point (i.e., cancel scenario).

NOTE: IF the ERO pager(s) in the Control Room do not activate and display the message within 3-4 minutes, THEN go to Step 5.1.2 to send the page.

- g. Monitor the Emergency Response Organization (ERO) pager(s) in the Control Room for verification of activation.

- h. Periodic fax printouts will automatically be sent to the Control Room, Technical Support Center, and Emergency Operations Facility, and JPIC to show who is responding and their estimated time of arrival.
- i. If the pager activation was successful, skip Steps 5.1.2 through 5.1.4 and return this procedure section and completed Attachment A to Emergency Preparedness or include in the TSC Manager turnover package.

Performed By:

Performer (Print and Sign)

Date / Time

- 5.1.2 Alpha-Numeric Paging Accessed Via Telephone (backup means, not required if Step 5.1.1 was successful).

NOTE 1: Enter pager number 0799 to do a PBNP All-Call page of the ERO.

NOTE 2: Enter the 4 digit pager number to page a specific individual.
(Ref. Emergency Telephone Directory)

NOTE 3: You must enter the asterisks and two digit code to have the message sent to the pagers (i.e., "50" would display "PBNP UE, JPIC Only Report" or "**" would display "Call Immediately").**

- a. Determine the pager message required:

- Use the following preprogrammed codes to provide event declarations.

**50 = PBNP UE, JPIC Only Report
**51 = PBNP ALERT. Report, Normal Route
**52 = PBNP ALERT. Report, From South
**53 = PBNP ALERT. Report, From North
**54 = PBNP SE. Report, Normal Route
**55 = PBNP SE. Report, From South
**56 = PBNP SE. Report, From North
**57 = PBNP GE. Report, Normal Route
**58 = PBNP GE. Report, From South
**59 = PBNP GE. Report, From North

- Use the following preprogrammed codes to provide other information, with a call back number, if appropriate:

**60 = Drill UE. JPIC Only Report
**61 = Drill. AL/SE/GE. Report
**01 = Call Immediately
**02 = Urgent Call
**03 = Call when Available
**07 = Please Call the Office
**99 = Phone Home

- b. Access the paging system by dialing ext. or
- c. Listen to the prerecorded message and an audible tone. Enter the four-digit pager number of the person or group you want to page as determined in the above notes.
- d. Listen to the next prerecorded message that asks you to enter your callback number. Enter the "***" code determined in Step 5.1.2.a and a phone number the person should call (only if appropriate).
- e. Listen for an audible tone again. The recording should then state that your message has been dispatched via the Wisconsin Electric paging system. Your page has now been completed.

NOTE: IF the ERO pager(s) in the Control Room do not activate and display the message within 3-4 minutes, THEN go to Step 5.1.3 to send the page.

- f. Monitor the ERO pager(s) in the control room for verification of activation.
- g. If the pager activation was successful, skip Steps 5.1.3 and 5.1.4 and return this procedure section to Emergency Preparedness or include in the TSC Manager turnover package.

Performed By:

Performer (Print and Sign)

Date / Time

- 5.1.3 Alpha-Numeric Paging Accessed Via IBM Mainframe (TSO) (backup means not required if Step 5.1.1 or 5.1.2 was successful).

NOTE: You must have TSO access to page via the IBM Mainframe system. If you do not have TSO access, notify DSS to re-assign to an individual with TSO access.

- a. Access the mainframe MULTSESS menu from a computer.
- b. After selecting the TSO application and receiving the READY text, type in "PAGE" and the enter key.

NOTE 1: Do not use symbols.

NOTE 2: Enter pager number 0799 to do a PBNP All-Call page of the ERO.

NOTE 3: To page an individual, hit the enter key and select the name from the list of pager users displayed using a last name search.

- c. A paging screen will appear asking you for an alpha-numeric message and the pager number you want to reach. Type the message per the event classification and any activation needs of the Emergency Response Facilities.
- d. Tab to the pager number blank and enter the pager or group number.
- e. Press ENTER to have your message sent.
- f. After a slight delay, a message comes up showing that your message was sent and who was paged.
- g. This completes the page. You can continue with another page or press PF3 as needed to return to the READY prompt. Type CESF and the enter key to log off TSO at this point.

NOTE: IF the ERO pager(s) in the Control Room do not activate and display the message within 3-4 minutes, THEN go to Step 5.1.4 to send the page.

- h. Monitor the ERO pager(s) in the control room for verification of activation.
- i. If the pager activation was successful, skip Step 5.1.4 and return this procedure section to Emergency Preparedness or include in the TSC Manager turnover package.

Performed By:

Performer (Print and Sign)

Date / Time

- 5.1.4 Manual Call Tree (reference Emergency Telephone Directory) (backup means, not required if Step 5.1.1 or 5.1.2 , or Step 5.1.3 was successful).

NOTE 1: Use this process if all automated methods of notifying the ERO fail.

NOTE 2: IF unable to contact any of the following personnel, THEN assign that section to onsite individual.

- a. Contact two people from the Emergency Preparedness staff, an onshift STA, OS, or Security, and the On-Call Management for each discipline as indicated below, instructing them to:
- Notify qualified ERO personnel for each position listed (ref ETD 01), determine FFD, fill the "*" minimum positions first, and staff each position to the (#) level indicated.
 - (a) FFD #1 - "Are you able to respond?"
 - (b) FFD #2 - If yes, "Have you consumed alcohol in the last five hours?"
 - (c) FFD #3 - If no, instruct person to report immediately to emergency response facility and fill the position of _____.
 - Contact you with periodic status updates.
 - Report to their emergency response facility upon completion of the notifications.
 - (a) EP Staff #1 _____ (Name)
 - (1) *TSC Manager (1)
 - (2) *TSC/EOF Communicator (1)
 - (3) *EOF/CR Communicator (1)
 - (4) *Engineering Coordinator (1)
 - (5) *Operations Coordinator (1)
 - (6) *OSC Coordinator (1)
 - (7) *ENS Communicator (1)
 - (8) *Rad/Chem Coordinator (1)
 - (9) Security Coordinator (1)
 - (10) Plant Status Monitor-TSC (1)
 - (11) Administrative Support Leader-TSC (1)
 - (12) Rad/Chem Monitor (1)
 - (13) Reactor/Core Physics Engineer (1)
 - (14) PRA Engineer (1)
 - (15) Mechanical Systems Engineer (1)
 - (16) Electrical/I&C Engineer (1)

(b) EP Staff #2 _____ (Name)

- (1) *Emergency Director (1)
- (2) *EOF Manager (1)
- (3) *TSC/CR Communicator (1)
- (4) *Dose/PAR Coordinator (1)
- (5) *State/Counties Communicator (1)
- (6) *JPIC Communicator (1)
- (7) *Resource Coordinator (1)
- (8) Plant Status Monitor-EOF (1)
- (9) Dose/PAR Monitor (1)
- (10) HPN/SRC Communicator (1)
- (11) State Liaison (1)
- (12) Offsite Assembly Area Coordinator (1)
- (13) Corporate Communicator (1)
- (14) Administrative Support Leader-EOF (1)
- (15) Kewaunee County Liaison (1)
- (16) Manitowoc County Liaison (1)
- (17) JPIC Manager

(c) Onshift STA, OS, or Security _____ (Name)

- (1) *DSS (Reentry Team Coordinator) from "off" crews (1)
- (2) *Operating Supervisor (Operations Leader) from "off" crews (2)
- (3) CO Reentry from "off" crews (4)
- (4) AO Reentry from "off" crews (4)

(d) Radiation Protection _____ (Name)

- (1) *Offsite Radiation Protection Coordinator (1)
- (2) *Radiation Protection Leader (1)
- (3) *Field Team Leader (1)
- (4) *Offsite RP Reentry (6)
- (5) Onsite RP Reentry (4)

(e) Maintenance Supervisor _____ (Name)

- (1) Mechanical Leader (1)
- (2) Electrical Leader (1)
- (3) Mechanical Reentry (4)
- (4) Electrical Reentry (4)

(f) I&C Supervisor _____ (Name)

- (1) I&C Leader (1)
- (2) I&C Reentry (4)

NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

(g) Chemistry Supervisor _____ (Name)

- (1) Chemistry Leader (1)
- (2) Chemistry Reentry (4)

- b. Return this procedure section to Emergency Preparedness or include in the TSC Manager turnover package.

Performed By:

Performer (Print and Sign) /
Date / Time

NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

5.2 Notifications to State and Counties

NOTE 1: The notification of state and county emergency government agencies shall be notified within 15 minutes of event classification, event termination, or change in protective action recommendations.

NOTE 2: The State Radiological Coordinator may place a separate call to obtain additional information for purposes of determining State and County Emergency Operation Center(s) activations.

NOTE 3: Priority levels are assigned to Two-Digit Dial-Select communications as follows:

1	Siren Activation
2	Event Notification/PAR Upgrade
3	Status Update
4	General Information

NOTE 4: IF the event is classified as a General Emergency, THEN recommend minimum protective actions.

5.2.1 The Emergency Director shall complete or delegate the completion of Attachment B, Nuclear Accident Reporting Form.

5.2.2 The Emergency Director shall approve the contents of Attachment B, Nuclear Accident Reporting Form, prior to the release of the information.

5.2.3 Provide this procedure section and the completed form to the person designated to make the communications, conducting a verbal review of the information as required.

NOTE: IF the Two-Digit Dial-Select is out-of-service, THEN use commercial telephones (ref. Emergency Telephone Directory) to make the notification.

5.2.4 Record a callback number for the facility you are calling from on Attachment B, Nuclear Accident Reporting Form.

5.2.5 Using the Two-Digit Dial-Select telephone:

- Pick up the handset and ask if the line is clear. (Similar to Gai-tronics)
- **IF** the line is busy,
THEN inform them of your Priority 2 notification.
- They will clear the line, unless a Priority 1 discussion is in progress.
- When the line is clear, continue with the notification.

NOTE 1: IF unable to contact a specific agency after five (5) rings, THEN press the # key to stop the ringing and continue with the notification to the agencies online. Then use commercial telephone to contact those agencies which were not reached.

NOTE 2: Two locations will ring for the State: WEM in Madison and State Patrol (off-hours). Press the # key to stop the ringing if one location does not answer.

5.2.6 Dial "22" to contact the following agencies simultaneously:

- Manitowoc County Sheriff Dispatcher
- Kewaunee County Sheriff Dispatcher
- State of Wisconsin Emergency Management (WEM)

5.2.7 Record the time and the name of the person who answers FOR EACH AGENCY on Attachment B, Nuclear Accident Reporting Form, you are transmitting.

5.2.8 Request each agency to remain on the line while you communicate the event information.

5.2.9 Request each agency to remain on the line while you ask one agency (preferably the State) to repeat the information as a confirmation of accuracy.

5.2.10 Request each agency to transmit the event information to appropriate personnel within their agency, instructing those individuals to place a return call to you to verify the notification.

5.2.11 **IF** commercial telephone lines must be used to complete the notifications, **THEN** call each of the following agencies as appropriate, repeating Steps 5.2.7 through Step 5.2.10. (ref Emergency Telephone Directory).

- Manitowoc County Sheriff Dispatcher
- Kewaunee County Sheriff Dispatcher
- State of Wisconsin Emergency Management (WEM)

NOTE: **IF** unable to remain at the callback number, **THEN** ensure an alternate person has assumed your responsibilities at that location.

5.2.12 Fax Attachment B, Nuclear Accident Reporting Form, to the following agencies using the pre-programmed keys or referencing the Emergency Telephone Directory.

- State of Wisconsin Emergency Management (WEM)
- Manitowoc County Emergency Management
- Kewaunee County Emergency Government
- Emergency Response Facilities (If Activating)

5.2.13 Remain at the callback number until the callback verifications have been received from the three agencies, recording the time and name of each caller on Attachment B, Nuclear Accident Reporting Form.

5.2.14 Return Attachment B, Nuclear Accident Reporting Form, to the Emergency Director.

5.3 Notification to KNPP Control Room

5.3.1 Obtain an approved copy of Attachment B, Nuclear Accident Reporting Form.

5.3.2 Contact the Kewaunee Nuclear Power Plant Control Room at _____ and relay the event information on Attachment B, Nuclear Accident Reporting Form.

Contact Name: _____ Time: _____

Classification Transmitted: _____

5.3.3 Return this procedure section and all attachments used to the Emergency Director.

Performed By:

_____	/	_____
Performer (Print and Sign)		Date / Time

5.4 Notifications to the NRC

NOTE: The notification to the NRC shall be completed immediately following the notifications to the state and counties and not exceeding 60-minutes from event classification, event termination, or change in protective action recommendations.

5.4.1 Emergency Director shall provide this procedure and the completed Attachment B, Nuclear Accident Reporting Form (or a copy), from Step 5.2.1 to the person designated to make the notification. A verbal review of the information will be conducted, if necessary.

NOTE 1: If the FTS-ENS phone is out-of-service, use commercial telephones (ref. Emergency Telephone Directory) to make the notification.

NOTE 2: The NRC may request a continuous open line of communication be maintained without regard to event classification. This request shall be honored if at all possible.

5.4.2 Contact the NRC Operations Center via the FTS-ENS phone by dialing the number exactly as listed on the phone. If number is busy, try the next number listed (ref. Emergency Telephone Directory).

5.4.3 Record the time and name of the NRC Duty Officer on Attachment B, Nuclear Accident Reporting Form, you are transmitting.

5.4.4 Communicate the event information clearly and concisely.

5.4.5 Fax the Nuclear Accident Reporting Form to the NRC using the pre-programmed fax key or referencing the Emergency Telephone Directory.

5.4.6 Make an entry into the appropriate NRC log.

- Control Room NOMS Narrative Log
- Technical Support Center ENS Log Book

5.4.7 **IF** not previously notified,
THEN contact the NRC resident inspector.

Contact Name: _____ Time: _____

Classification Transmitted: _____

5.4.8 Return or fax Attachment B, Nuclear Accident Reporting Form, to the Emergency Director.

5.5 Status Updates to State and Counties

NOTE 1: Status updates should be made to State and County Emergency agencies approximately hourly, upon a major change in plant/radiological status, or at their request.

NOTE 2: Use status boards Attachment C, Plant Status Update, Attachment D, Radiological Status Update, and/or Attachment E, Status Reports on Plant Systems and Control for Affected Unit as a verbal guideline for communicating status updates.

NOTE 3: IF unable to contact a specific agency, THEN continue with the notification to other agencies, attempt to contact those agencies which have not been contacted.

NOTE 4: IF the Two-Digit Dial-Select is out-of-service, THEN use commercial telephones (preferably via conference call referring to the Emergency Telephone Directory) to make the status update.

5.5.1 Using the Two-Digit Dial-Select telephone:

- Pick up the handset and ask if the line is clear. (Similar to Gai-tronics)
- IF the line is busy, THEN inform them of your Priority 3 notification.
- They will clear the line, unless a Priority 1 or 2 discussion is in progress.
- When the line is clear, continue with the notification.

NOTE: IF unable to contact a specific agency after five (5) rings, THEN press the # key to stop the ringing. Contact those agencies by commercial telephone after completing the status update.

5.5.2 Dial "53, 43, and 83" consecutively to contact the following agencies simultaneously:

- 53 - Manitowoc County EOC
- 43 - Kewaunee County EOC
- 83 - State of Wisconsin Emergency Management (WEM) EOC

5.5.3 Request each agency remain on the line while you communicate the status update event information and answer questions.

- 5.5.4 **IF** commercial telephone lines must be used to complete the notifications, **THEN** call the following agencies (ref. Emergency Telephone Directory):
- Manitowoc County EOC
 - Kewaunee County EOC
 - State of Wisconsin Emergency Management (WEM) EOC
- 5.5.5 **IF** a request has been made by the State or County for a written update **THEN** complete the appropriate section(s) of Attachment C, D, or E, obtain the Emergency Director approval, and fax using the pre-programmed fax keys or referencing the Emergency Telephone Directory.
- State of Wisconsin Emergency Management (WEM)
 - Manitowoc County Emergency Management
 - Kewaunee County Emergency Government
 - Emergency Response Facilities (If Activating)
- 5.5.6 Repeat Steps 5.5.1 through 5.5.5 each time a status update is required.
- 5.5.7 **IF** a written update of Attachment C, D, or E was faxed to the State or County, **THEN** return the appropriate completed attachment(s) to the Emergency Director.

5.6 Status Updates to the NRC

NOTE 1: The NRC should receive status updates approximately hourly, upon a major change in plant/radiological status, or at their request.

NOTE 2: Use status boards Attachment C, Plant Status Update, Attachment D, Radiological Status Update, and/or Attachment E, Status Reports on Plant Systems and Control for Affected Unit as a verbal guideline for communicating status updates.

NOTE 3: **IF** the FTS-ENS phone is out-of-service, **THEN** use commercial telephones (ref. Emergency Telephone Directory) to make the notification.

NOTE 4: The NRC may request that a continuous open line of communication be maintained without regard to event classification.

5.6.1 Contact the NRC Operations Center via the FTS-ENS phone by dialing the number exactly as listed on the NRC phone. If number is busy, try the next number listed (ref. Emergency Telephone Directory).

5.6.2 **IF** a request is made by the NRC to fax a written status update, **THEN** complete the appropriate section(s) of Attachment C, D, or E, obtain the Emergency Director approval, and fax to the NRC.

5.6.3 **IF** a written update of Attachment C, D, or E was faxed to the NRC, **THEN** return the completed Attachments to the Emergency Director.

6.0 REFERENCES

- 6.1 WE to NRC letter May 19, 1983, Staffing Levels for Emergency Situations, Point Beach Nuclear Plant
- 6.2 NRC letter to WE, December 20, 1985, Inspection Report Nos. 50-266/83-01 and 50-301/83-01
- 6.3 Emergency Plan, EP 5.0, Organizational Control of Emergencies

7.0 BASES

- B-1 10 CFR 50.47(b), Emergency Plans
- B-2 10 CFR 50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors
- B-3 NUREG-1022, Event Reporting Guidelines, 10 CFR 50.72 and 50.73, Rev 1, January 1998

ATTACHMENT A
ERO NOTIFICATION SYSTEM
SCENARIO SELECTION MATRIX

Scenario Number	Emergency Class	Approach routes
100	Unusual Event.	
210	Alert	Use Normal Routes.
211	Alert	Approach PB from the south.
212	Alert	Approach PB from the north.
320	Site Emergency	Use Normal Routes.
321	Site Emergency	Approach PB from the south.
322	Site Emergency	Approach PB from the north.
420	General Emergency	Use Normal Routes.
421	General Emergency	Approach PB from the south.
422	General Emergency	Approach PB from the north.
555	Disregard previous page.	
556	Disregard previous page. Standby for corrected information. Do not call.	

Determine the 3-digit scenario number by choosing the appropriate classification and approach message from the matrix above. Record here _____

POINT BEACH NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURES

EPIP 2.1
NNSR
Revision 21
March 20, 2001

NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

ATTACHMENT B
NUCLEAR ACCIDENT REPORTING FORM

NOTE: Direct state and counties to record the information on the
State of Wisconsin Nuclear Accident Reporting System (NARS form).

1. Status

- (A) Actual (C) Drill
(B) Exercise (D) Termination

2. Station

- (T) Point Beach
U1 - U2 - Both

3. On-site Incident Classification

- (A) Unusual Event (D) General Emergency
(B) Alert (E) Recovery
(C) Site Emergency (F) Not Applicable

4. Incident Classification/Termination

Time: _____ / _____
Date: _____ / _____
EAL # _____

5. Release to Environment

- (A) None
(B) Potential
(C) Occurring
(D) Terminated

6. Type of Release

- (A) Not Applicable
(B) Radioactive Gas
(C) Radioactive Liquid

7. Wind Direction

Degrees From: _____
Downwind Sector: _____

8. Wind Speed

(B) Miles/hr: _____

9. Protective Actions Recommended

- (A) None
(B) Evacuate 0-2 mile radius
(C) Evacuate 0-5 miles radius
(D) Evacuate 2-5 miles for Sectors _____
(E) Evacuate 5-10 miles for Sectors _____
(F) Other _____

10. Additional Information From EAL Table:

Emergency Director Approval: _____ Date / Time _____ / _____

11. Immediately upon Emergency Director approval, relay information to Emergency Managements (EM) listed.

Request the answering parties to have the appropriate EM personnel call 920/____ - _____ for notification verification.
State/County message transmitted by _____ in the Point Beach Nuclear Plant _____.
(Name)

(CR/TSC/EOF/AEOF)

12. STATE/COUNTY ANSWERED

CALLBACK VERIFICATION

Agency	Time	Name	Position	Time	Name	Contact Phone #
Manitowoc Co	_____	_____	EM Director	_____	_____	_____
Kewaunee Co	_____	_____	EM Director	_____	_____	_____
Wisconsin	_____	_____	Duty Officer	_____	_____	_____

13.

NRC ANSWERED - Callback Verification Not Required

Duty Officer Name _____ Time _____ Continuous phone link requested: ___No ___Yes
NRC message transmitted by _____ in the Point Beach Nuclear Plant _____.

(Name)

(CR/TSC/EOF/AEOF)

ATTACHMENT B
NUCLEAR ACCIDENT REPORTING FORM
AFFECTED SECTORS BASED ON WIND DIRECTION

NOTE: If wind speed is less than three (3) mph or lake breeze conditions exist, then recommend protective actions for all sectors (360°) 0-5 miles. Lake breeze conditions exist if the difference between actual wind direction values for inland and near shore meteorological towers is greater than 90°.

<u>Wind Direction* (Degrees From)</u>	<u>Sectors in Downwind Area</u>
0 - 11	H, J, K
> 11 - 34	J, K, L
> 34 - 56	K, L, M
> 56 - 79	L, M, N
> 79 - 101	M, N, P
> 101 - 124	N, P, Q
> 124 - 146	P, Q, R
> 146 - 169	Q, R, A
> 169 - 191	R, A, (B)
> 191 - 214	A, (B), (C)
> 214 - 236	(B), (C), (D)
> 236 - 259	(C), (D), (E)
> 259 - 281	(D), (E), (F)
> 281 - 304	(E), (F), (G)
> 304 - 326	(F), (G), H
> 326 - 349	(G), H, J
> 349 - 360	H, J, K
> 360 - 371 **	H, J, K
> 371 - 394 **	J, K, L
> 394 - 416 **	K, L, M
> 416 - 434 **	L, M, N
> 434 - 461 **	M, N, P
> 461 - 484 **	N, P, Q
> 484 - 506 **	P, Q, R
> 506 - 520 **	Q, R, A

* As read on PPCS or control room instruments.

** As read on chart recorder.

() Denotes sectors over Lake Michigan.

ATTACHMENT C
PLANT STATUS UPDATE

Check One: ☐ Actual ☐ Drill ☐ Exercise

NOTE: Cross-out section(s) not being communicated.

1. Point Beach Nuclear Plant

2. Date/Time: ____/____/____

3. Description of Event: _____

4. Emergency Action Level(s): _____

5 Major Equipment Affected: (LIST)

a. _____
c. _____
e. _____

b. _____
d. _____
f. _____

6. Reactor Status: (Check one)

a. _____ Critical
b. _____ Shutdown

7. Radiological boundaries Lost(L) or Challenged (C):
(Indicate all that apply)

a. _____ Fuel Cladding
b. _____ Reactor Coolant System
c. _____ Containment

8. Plant Personnel Status (Enter # or N/A for each type incident):

a. # _____ Deaths
c. # _____ Injured Personnel Treated On-Site
e. # _____ Contaminated Personnel On-Site
g. Other (explain): _____

b. # _____ Overexposure to Personnel
d. # _____ Injured Personnel Treated Off-Site
f. # _____ Contaminated Personnel Off-Site

9. Areas Affected by A Radiological Release

a. Plume Path (Downwind Sectors): _____: _____: _____: _____ Distance _____ (mi)
b. Deposition (Describe Location): _____

10. News Statement from the JPIC or Established Media Center

a. The Next News Statement is Scheduled for: Date: _____ Time: _____

11. State or Local Assistance Requested by the Plant

Emergency Director Approval: _____ Date / Time ____/____/____

Manitowoc Co. _____ Kewaunee Co. _____ Wisconsin WEM _____ NRC _____
(Time) (Time) (Time) (Time)

Communicated By: _____

ATTACHMENT D
RADIOLOGICAL STATUS UPDATE
Page 1 of 3

Check One: ☐ Actual ☐ Drill ☐ Exercise

NOTE 1: { } denotes PPCS screen for obtaining data.

NOTE 2: Cross-out section(s) not being communicated.

1. Point Beach Nuclear Plant

2. Date/Time: ____/____/____

3. Plant Status:

a. General: ____ Improving ____ Stable ____ Degrading
b. Electrical Power: ____ Satisfactory ____ Problems

If problems, describe: _____

4. Offsite Radiological Conditions:

a. Release Prognosis:

____ No Release is expected
____ Release is expected at the start time listed in 4b.
____ Release is in progress

b. Event Times (Complete all applicable times):

____ Reactor Trip
____ Start of release to containment
____ Start of release to environment
____ *Release Stop
*(Actual / Estimated / Default) Line out inappropriate word(s)

c. Type of Release:

____ Liquid ____ Controlled ____ Monitored
____ Airborne ____ Uncontrolled ____ Unmonitored
Release Path: _____

d. Plume Path (Downwind Sectors): ____: ____: ____: ____ Distance ____ (mi)

e. Downwind Doses at the Plume Centerline:

Based on: ____ Projections ____ Field Measurement
1 Mi (SBCC) ____ rem TEDE ____ rem CDE Thyroid
2 Mi. ____ rem TEDE ____ rem CDE Thyroid
5 Mi. ____ rem TEDE ____ rem CDE Thyroid
10 Mi. ____ rem TEDE ____ rem CDE Thyroid

ATTACHMENT D
RADIOLOGICAL STATUS UPDATE

Page 2 of 3

- f. Surface Deposition: Based on: _____ Projection _____ Field Measurement
dpm/100 cm² - Ci/m² _____ Location: _____
dpm/100 cm² - Ci/m² _____ Location: _____
dpm/100 cm² - Ci/m² _____ Location: _____
(Line out inappropriate unit)

- g. Recommended protective actions were made at (Time: _____) on the Wisconsin Nuclear Accident Reporting System form.

5. Meteorological Conditions: {Releases/Met Summary 9-C}

- a. Wind Speed: _____ MPH
b. Wind Direction: _____ Degrees
c. Stability Class (circle one): A B C D E F G
d. Mixing Layer Height: _____ Ft.
e. Precipitation (check one):
_____ Light Rain _____ Moderate Rain _____ Heavy Rain _____ None
_____ Light Snow _____ Moderate Snow _____ Heavy Snow

6. Reactor Status: _____ At Power (_____ Megawatts Thermal)
{Core} _____ Tripped (Power Level at trip _____ Megawatts Thermal)
_____ Hot Shutdown (Current RCS Temperature _____ deg. F.)
_____ Cold Shutdown (RCS is less than 200°F.)

7. Core Status: _____ No Damage Expected
_____ Core Damage sequence in progress (Est. Time: _____)
_____ Gap Release (Est. Time: _____)
_____ In-Vessel Severe Core Damage (Est. Time: _____)
_____ Vessel Melt Through (Est. Time: _____)

Core Exit Temperature: _____ Increasing _____ Stable _____ Decreasing
{SAS Trend-Core Cooling}

8. Containment Status:

- a. Containment Spray: _____ ON
_____ OFF
b. Containment Leak Rate
_____ None
_____ Calculated (_____ cc/sec)
_____ Design Rate (0.1% per day)
_____ 100% per Day
_____ 100% per Hour
c. Pressure: {SAS Trends-Cont PPR} _____ Increasing
_____ Stable
_____ Decreasing
d. Temperature: {SAS Trends-Cont HHT} _____ Increasing
_____ Stable
_____ Decreasing

ATTACHMENT D
RADIOLOGICAL STATUS UPDATE
Page 3 of 3

9. Steam Generator Status:

- a. Leak Rate (Check One):
☐ None
☐ Full Pressure (# of tubes _____)
☐ Low Pressure (# of charging pumps _____)
☐ Calculated (Gallons per minute _____)
- b. Reactor Coolant Concentrations:
☐ N/A (No Leak)
☐ Normal
☐ 100x normal non-nobles
☐ Calculated Concentration (Attached Analysis)
- c. Partitioning:
☐ N/A (No leak)
☐ Leak is above steam generator water level (default)
☐ Leak is below steam generator water level
- d. Release Path
☐ None
☐ Safety Valve (or PORV)
☐ Air Ejector

10. Containment Bypass Status:

- a. Containment Bypass Leak Rate
☐ None
☐ Calculated (_____ cc/sec)
☐ 0.1% per Day
☐ 100% per Day
☐ 100% per Hour
- b. Release Path:
☐ None
☐ Filtered
☐ Unfiltered

11. Gross Release Rate Data:

- a. ☐ Not Applicable (No Leak)
- b. ☐ Not Available
- c. Total _____ Ci/sec Kr, Xe _____% Iodines _____% Cs _____% Te, Sb _____%
Ba, Sr _____% Ru, Mo _____% La, Y, Ce, Np _____%

12. Specific Isotopic Release Data (Ci/sec):

- a. ☐ Not Applicable (No leak)
- b. ☐ Not available
- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| c. H-3 _____ | Sr-91 _____ | Te-131 _m _____ | Xe-133 _m _____ |
| Mn-54 _____ | Y-91 _____ | Te-132 _____ | Xe-135 _____ |
| Co-58 _____ | Mo-99 _____ | I-131 _____ | Xe-138 _____ |
| Kr-85 _____ | Te-99 _m _____ | I-132 _____ | Cs-134 _____ |
| Kr-85 _m _____ | Ru-103 _____ | I-133 _____ | Cs-136 _____ |
| Kr-87 _____ | Ru-106 _____ | I-134 _____ | Cs-137 _____ |
| Kr-88 _____ | Sb-127 _____ | I-135 _____ | Ba-140 _____ |
| Sr-89 _____ | Sb-129 _____ | Xe-131 _m _____ | La-140 _____ |
| Sr-90 _____ | Te-129 _m _____ | Xe-133 _____ | Ce-144 _____ |

Emergency Director Approval: _____ Date / Time _____ / _____

Manitowoc Co. _____ Kewaunee Co. _____ Wisconsin WEM _____ NRC _____
(Time) (Time) (Time) (Time)

Communicated By: _____

ATTACHMENT E
STATUS REPORT ON PLANT SYSTEMS AND CONTROLS FOR AFFECTED UNIT
Page 1 of 2

Check One: ☐ Actual ☐ Drill ☐ Exercise

NOTE 1: { } denotes PPCS screen for obtaining data.

NOTE 2: Cross-out section(s) not being communicated.

1. Basic Accident Information (Unit _____)

- a. Status Report Date/Time: _____/_____; Report # _____
(Date) (Time-24 Hours)
- b. Emergency Classification: _____
- c. (If applicable) Time of Reactor Shutdown: _____ hrs.
- d. (If applicable) Time of Radiological Release to Containment: _____ hrs.
- e. (If applicable) Time of Radiological Release from Plant: _____ hrs.

2. Status of Reactivity Control

Subcritical Yes _____ No _____

3. Status of Core Cooling {Core}

- a. Highest Th _____ °F Coldest Tc _____ °F
- b. Incore Thermocouples: Average Temperature _____ °F
- c. Pressurizer Heaters Available Yes _____ No _____
- d. Subcooling Margin: _____ °F

4. Status of Reactor Coolant System Integrity {Core}

- a. Pressurizer or Reactor System Pressure _____ psig
- b. Pressurizer Level _____ %
- c. Primary System Relief Valves Closed Yes _____ No _____
- d. Letdown Flow _____ gpm
- e. Charging Pump Flow _____ gpm

5. Status of Secondary Systems {Secondary}

- a. Steam Generator Pressure "A" _____ psig "B" _____ psig
- b. Steam Generator Level "A" _____ % "B" _____ %
- c. Feedwater Flow, Auxiliary "A" _____ gpm "B" _____ gpm
- Main "A" _____ klbm/h "B" _____ klbm/h

6. Containment {Containment}

- a. Pressure WR _____ psig NR _____ psig
- b. Containment Spray Flow _____ gpm
- c. NaOH Addition Yes _____ No _____ Time _____ Level _____ %
- d. Containment Recirculation Coolers Running (Circle) 1 2 3 4
- e. Sump B Level _____ inches
- f. H₂ Concentration _____ %
- g. Containment Isolation Valves (Note any not closed) _____

ATTACHMENT E
STATUS REPORT ON PLANT SYSTEMS AND CONTROLS FOR AFFECTED UNIT
Page 2 of 2

7. Safeguards Systems {Core}

- | | <u>Train A</u> | <u>Train B</u> |
|--|----------------|-----------------|
| a. Safety Injection | | |
| High Head | _____ gpm | _____ gpm |
| Low Head | _____ gpm | _____ gpm |
| b. Accumulators | | |
| Level | _____ % | _____ % |
| Pressure | _____ psig | _____ psig |
| Isolation Valve Open | Yes/No | Yes/No |
| c. Refueling Water Storage Tank Level | _____ % | {Core} |
| d. Component Cooling Water | | |
| Temperature | inlet _____ °F | outlet _____ °F |
| Flow | _____ gpm | |
| e. Service Water No. of pumps running | _____ | Temp. _____ °F |
| f. ESF pump (SI, RHR, AFW, CS) recirculation status, enter in remarks. | | |

8. State of Meteorology {Releases/Net summary} **Primary Tower** **Inland Tower**

- | | 10M | 45M | |
|---|----------|-----------|-----------|
| a. Wind Direction (avg.) | _____ | _____ ° | _____ ° |
| b. Wind Speed | _____ | _____ mph | _____ mph |
| c. $\sigma\theta$ | _____ | _____ ° | _____ ° |
| d. $\Delta T/\Delta H$ | _____ | _____ °F | |
| e. Atmospheric Stability Class | _____ | | |
| f. Lake Breeze Conditions Exist? (circle) | Yes / No | | |

9. Status of Power Supplies

- | | | | | | | | | |
|-------------------|--------|-------|--------|-------|-------------|-------|-----|-----|
| a. Offsite Power | Unit 1 | Y / N | Unit 2 | Y / N | Gas Turbine | Y / N | | |
| b. Diesel Running | G01 | Y / N | G02 | Y / N | G03 | Y/N | G04 | Y/N |
| Diesel Loaded | G01 | Y / N | G02 | Y / N | G03 | Y/N | G04 | Y/N |

10. Other Equipment Remarks:

Emergency Director Approval: _____ Date / Time _____ / _____

Manitowoc Co. _____ Kewaunee Co. _____ Wisconsin WEM _____ NRC _____
(Time) (Time) (Time) (Time)

Communicated By: _____

EPIP 5.2

RADIOIODINE BLOCKING AND THYROID DOSE ACCOUNTING

DOCUMENT TYPE: Technical

CLASSIFICATION: NNSR

REVISION: 13

EFFECTIVE DATE: March 20, 2001

REVIEWER: N/A

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER (title): Emergency Preparedness Supervisor

OWNER GROUP: Emergency Preparedness

Verified Current Copy: _____
Signature Date Time

List pages used for Partial Performance

Controlling Work Document Numbers

NAMES AND
TELEPHONE NUMBERS
DELETED

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1.0 PURPOSE

This procedure provides a method for quickly estimating the dose rate to the thyroid following a known or predicted exposure to radioactive iodine. It also provides guidelines to assist in determining when to issue potassium iodide. Potassium iodide (KI) is a stable iodine which will saturate the thyroid gland, preventing unnecessary thyroid gland exposure from radioiodine.

2.0 PREREQUISITES

2.1 Responsibilities

- 2.1.1 The Rad/Chem Coordinator or Dose/PAR Coordinator shall recommend the need to issue KI and designate personnel to complete the administration.
- 2.1.2 The Emergency Director shall approve the use of KI, documenting the approval on Attachment B, Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution.
- 2.1.3 Company Medical Services personnel, or a designated physician, will determine the need for KI on a continued basis (after an initial dose of one tablet).

2.2 Equipment

Bottles of 130 mg KI tablets

3.0 PRECAUTIONS AND LIMITATIONS

- 3.1 To be most effective, KI must be taken within 1 to 2 hours after exposure to radioiodine, with maximum effectiveness when taken immediately prior to exposure.
- 3.2 **IF** KI is administered more than 4 hours after an acute ingestion or inhalation of radioiodine, **THEN** its effectiveness as a thyroid blocking agent is less than 50 percent.
- 3.3 A copy of the pharmaceutical company instructions, Potassium Iodide Tablets Patient Package Insert, for the use of KI tablets is reproduced as Attachment A. This attachment is furnished for information only.
- 3.4 KI should **NOT** be taken by persons allergic to iodine.
- 3.5 KI should only be taken by individuals on a voluntary basis.
- 3.6 Distribution of KI to non-WE and Security personnel will be the responsibility of the organizations to which these personnel belong.

POINT BEACH NUCLEAR PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURES

RADIOIODINE BLOCKING AND THYROID DOSE
ACCOUNTING

EPIP 5.2
NNSR
Revision 13
March 20, 2001

4.0 INITIAL CONDITIONS

- 4.1 An emergency occurs where the projected dose to the thyroid is likely to exceed 25 rem.
- 4.2 IF the projected dose to the thyroid is NOT likely to exceed 25 rem,
THEN the issuance of KI to approved personnel is determined based upon the event.

5.0 PROCEDURE

5.1 Dose Accountability For Exposures To Airborne Radioiodine and
Thyroid Dose Calculations

It is imperative that accurate exposure times and radioiodine concentrations encountered be maintained for each individual's exposure to airborne radioiodine. The dose to the thyroid from airborne radioiodine may be estimated as follows, completing Attachment B, Airborne Radioiodine Dose Accountability and Potassium Iodide Distribution.

5.1.1 Inhaled Dose Conversion Factors, rads/ μ Ci:

I-131	1.480 rads/ μ Ci
I-132	0.054 rads/ μ Ci
I-133	0.400 rads/ μ Ci
I-134	0.025 rads/ μ Ci
I-135	0.124 rads/ μ Ci

5.1.2 Breathing Rates

- Assume 1.25E06 cc/hour ($= 3.47\text{E-}04 \text{ m}^3/\text{sec.}$) for short exposure times or exposures while working.
- Assume 8.35E05 cc/hour ($= 2.32\text{E-}04 \text{ m}^3/\text{sec.}$) for long exposure times (in excess of a single day).

- 5.1.3 IF the concentration of each iodine isotope is NOT known,
THEN use the dose conversion factor for I-131 listed in Step 5.1.1 and illustrated in the Step 5.1.5 example.

RADIOIODINE BLOCKING AND THYROID DOSE
ACCOUNTING

5.1.4 The total amount of radioiodine inhaled in μCi is estimated by multiplying the average airborne concentration in $\mu\text{Ci/cc}$ by the breathing rate in cc/hour by the total time of exposure in hours. The thyroid dose in rads is then calculated by multiplying the total amount in μCi by the dose conversion factors ($\text{rads}/\mu\text{Ci}$) from Step 5.1.1.

5.1.5 Example:

Gross Iodine = $5.4\text{E-}07 \mu\text{Ci/cc}$ in air

Breathing Rate = $1.25\text{E}06 \text{ cc/hour}$

Expected Exposure Time = 1 hour

Inhaled Dose Conversion Factor (I-131) = $1.48 \text{ rads}/\mu\text{Ci}$

Calculation:

$$(5.4\text{E-}07 \mu\text{Ci/cc}) (1.25\text{E}06 \text{ cc/hour}) (1.48 \text{ rads}/\mu\text{Ci}) (1 \text{ hour}) \\ = 0.999 \text{ rads Thyroid Dose}$$

5.2 Administration

5.2.1 Single dose 130 mg tablets of KI are maintained in the following locations:

- a. Operations Support Center
- b. Offsite Radiation Protection Facility
- c. Control Room

5.2.2 **IF** the following conditions are met,
THEN KI should be distributed to approved personnel for self administration.

- a. The projected dose to the thyroid is likely to exceed 25 rem,

OR

- b. The projected dose to the thyroid is **NOT** likely to exceed 25 rem; however, based upon the event it is recommended by the Rad/Chem Coordinator or Dose/PAR Coordinator,

AND

- c. The Emergency Director has approved the distribution of KI.

5.2.3 Contact the Security Shift Commander for issuing KI to security personnel.

5.2.4 Verify the shelf life of KI tablets is current as indicated on the pharmaceutical container prior to issuing.

5.2.5 Prior to issue to each individual:

RADIOIODINE BLOCKING AND THYROID DOSE
ACCOUNTING

- a. Furnish a copy of Attachment A, Potassium Iodide Tablets Patient Package Insert, for informational purposes and conduct briefings regarding the data..
- b. Ask if they are allergic to iodine. **DO NOT** issue KI if the answer is **YES**. Log their name on Attachment C, Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide.
- c. Ask if they are accepting the KI on a voluntary basis for self administration. **IF YES**, issue KI and log their name on Attachment B AIRBORNE RADIOIODINE DOSE ACCOUNTABILITY AND POTASSIUM IODINE. **IF NO**, do not issue KI and log their name on Attachment C, Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide.

5.2.6 Personnel listed on Attachment C, Record of Known Allergy To or Voluntary Refusal to Take Potassium Iodide, require alternate protective measures be provided and/or their emergency response duties reassigned.

6.0 REFERENCES

- 6.1 Letter Wisconsin Electric medical department, dated November 6, 1980, and Attachment 1, Protection Against Radioactive Iodines.
- 6.2 Memo NPM 91-0273, Potassium Iodide - Issuance Dose Level, dated February 7, 1991.

7.0 BASES

- B-1 NRC Information Notice No. 88-15: Availability of U.S. Food and Drug Administration (FDA)-Approved Potassium Iodide for Use in Emergencies Involving Radioactive Iodine, April 18, 1988.
- B-2 NUREG-1210, Public Protective Actions - Predetermined Criteria and Initial Actions, Volume 4, Pilot Program: NRC Severe Reactor Accident Incident Response Training Manual, February 1987.

RADIOIODINE BLOCKING AND THYROID DOSE
ACCOUNTING

ATTACHMENT A
POTASSIUM IODIDE TABLETS PATIENT PACKAGE INSERT

Note: This attachment is furnished for information only.

Patient Package Insert For

THYRO-BLOCK®
TABLETS
(POTASSIUM IODIDE TABLETS, USP)
(pronounced *pos-TASS-e-um EYE-oh-dyed*)
(abbreviated: KI)

TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU. IN A RADIATION EMERGENCY, RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR. POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. **DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE.** (SEE SIDE EFFECTS BELOW.)

INDICATIONS
THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

DIRECTIONS FOR USE
Use only as directed by State or local public health authorities in the event of a radiation emergency.

DOSE
Tablets: **ADULTS AND CHILDREN 1 YEAR OF AGE OR OLDER:** One (1) tablet once a day. Crush for small children.
BABIES UNDER 1 YEAR OF AGE: One-half (1/2) tablet once a day. Crush first.

Take for 10 days unless directed otherwise by State or local public health authorities.

Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep container tightly closed and protect from light.

WARNING
Potassium iodide should not be used by people allergic to iodide. Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the public health authority.

DESCRIPTION
Each white, round, scored, monogrammed THYRO-BLOCK® TABLET contains 130 mg of potassium iodide. Other ingredients: magnesium stearate, microcrystalline cellulose, silica gel, and sodium thiosulfate.

HOW POTASSIUM IODIDE WORKS

Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods, like iodized salt or fish. The thyroid can "store" or hold only a certain amount of iodine.

In a radiation emergency, radioactive iodine may be released in the air. This material may be breathed or swallowed. It may enter the thyroid gland and damage it. The damage would probably not show itself for years. Children are most likely to have thyroid damage.

If you take potassium iodide, it will fill up your thyroid gland. This reduces the chance that harmful radioactive iodine will enter the thyroid gland.

WHO SHOULD NOT TAKE POTASSIUM IODIDE

The only people who should not take potassium iodide are people who know they are allergic to iodide. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or antithyroid drug). Pregnant and nursing women and babies and children may also take this drug.

HOW AND WHEN TO TAKE POTASSIUM IODIDE
Potassium iodide should be taken as soon as possible after public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "hold" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than 10 days.

SIDE EFFECTS
Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).

A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains, or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.

Taking iodide may rarely cause overactivity of the thyroid gland, underactivity of the thyroid gland, or enlargement of the thyroid gland (goiter).

WHAT TO DO IF SIDE EFFECTS OCCUR
If the side effects are severe or if you have an allergic reaction, stop taking potassium iodide. Then, if possible, call a doctor or public health authority for instructions.

HOW SUPPLIED
THYRO-BLOCK® TABLETS (Potassium Iodide Tablets, USP) are white, round tablets, one side scored, other side debossed 472 WALLACE, each containing 130 mg potassium iodide. Available in bottles of 14 tablets (NDC 0037-0472-20).

WALLACE LABORATORIES
Division of
CARTER-WALLACE, INC.
Cranbury, New Jersey 08512

IN-0472-03

Rev. 5/94

EPIP 5.2
 NNSR
 Revision 13
 March 20, 2001

Revision 13
March 20, 2001

TABLE 1 - THYROID DOSE RATE CALCULATION

TABLE 2 - THYROID DOSE FROM AIRBORNE RADIOIODINE AND POTASSIUM IODIDE DISTRIBUTION

(4) Record sample number(s) data is from, or how long airborne radioiodine concentration was derived:

Issued By: _____ Date/Time ____/____/____

RADIOIODINE BLOCKING AND THYROID DOSE ACCOUNTING

EPIP 5.2
 NNSR
 Revision 13
 March 20, 2001

ATTACHMENT C
RECORD OF KNOWN ALLERGY TO OR VOLUNTARY REFUSAL TO TAKE POTASSIUM
IODIDE

[illegible]

Recommended By: _____ Date/Time ____/____
Rad/Chem Coordinator or Dose/PAR Coordinator

Approved By: _____ Date/Time ____/____/____
Emergency Director

Issued By: _____ Date/Time ____/____/____

EPIP 11.2

MEDICAL EMERGENCY

DOCUMENT TYPE: Technical

CLASSIFICATION: NNSR

REVISION: 15

EFFECTIVE DATE: March 20, 2001

REVIEWER: N/A

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER (title): Emergency Preparedness Supervisor

OWNER GROUP: Emergency Preparedness

Verified Current Copy: _____
Signature Date Time

List pages used for Partial Performance

Controlling Work Document Numbers

_____	_____	_____
_____	_____	_____
_____	_____	_____

NAMES AND
TELEPHONE NUMBERS
DELETED

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MEDICAL EMERGENCY

1.0 PURPOSE

This procedure is to provide Point Beach Nuclear Plant personnel with guidance for the immediate care of an injured/ill person(s) requiring onsite or offsite medical assistance. Both contaminated and non-contaminated events are considered.

2.0 PREREQUISITES

2.1 Responsibilities

- 2.1.1 The Duty Shift Superintendent (DSS) is responsible for the overall command and control of the event (OSC Coordinator or Reentry Team Coordinator if the OSC is activated).
- 2.1.2 Radiation Protection personnel are responsible for providing radiation and contamination controls at the scene, during transport to the hospital, and at the hospital.
- 2.1.3 The individual discovering the medical emergency is responsible for notifying the Control Room, providing treatment if qualified, and remaining at the scene to assist.
- 2.1.4 Personnel trained in first aid and CPR shall be immediate responders to the scene and provide treatment as appropriate.
- 2.1.5 The PBNP nurse is responsible for determining the equipment for the first aid room, maintaining the supply inventory, and responding to the event if onsite.
- 2.1.6 The DSS, Industrial Health & Safety Manager, and injured/ill person(s) supervisor, group manager, or contractor supervisor are responsible for ensuring the completion of NP 1.9.2, Accident And Personal Injury Reporting; OSHA Form 200 Requirements; Industrial Safety.

MEDICAL EMERGENCY

2.2 Equipment

2.2.1 On-Site First Aid Provisions (EPMP 1.3)

- a. The plant is provided with emergency showers for use with a severely contaminated but less severely injured/ill person(s).

NOTE: IF, for emergency reasons, it is necessary to transfer first aid supplies to the Radiation Control Area, THEN the unused supplies will be retained by Radiation Protection for release to the clean side.

- b. North and South Gatehouse - First aid kit (both) and one long board stretcher (Southgate).
- c. Turbine Building
- Control Room - First aid kit, burn kit, and trauma kit.
 - South of Control Room - Stretcher, first aid kit, and burn kit.
 - El. 8', Unit 1 Truck Access - Stretcher, first aid kit, and burn kit.
- d. Switchyard - First aid kit and burn kit.
- e. Facades, Unit 1 and Unit 2 - Stretcher, first aid kit, and burn kit; located on El. 66' and 26' outside each containment's personnel hatch.
- f. Site Boundary Control Center - First aid kits and burn kits.
- g. RCA Checkpoint - First aid kits, burn kit, trauma kit, and stretcher.
- h. Technical Support Center - First aid kit, burn kit, trauma kits, and stretcher.
- i. Sewage Treatment Plant - First aid kit.
- j. RCA Maintenance Shop - First aid kit and trauma kit.
- k. Emergency Plan Vehicles - First Aid Kit (one per vehicle).

2.2.2 An onsite first aid room is located in the extension building on the first level.

2.2.3 Radiation Protection supplies and survey instrumentation.

MEDICAL EMERGENCY

- 2.2.4 Portable FM Radios.
- 2.2.5 A fully equipped, controlled access emergency room will be used at Aurora Medical Center - Manitowoc County. (Reference EPMP-1.1b)
- 2.2.6 Letters of agreement are in existence with ambulance services, Aurora Medical Center - Manitowoc County, and trained physicians for treating contaminated, injured person(s).

3.0 PRECAUTIONS AND LIMITATIONS

- 3.1 Employees rendering medical assistance for serious injuries shall be first aid and/or CPR qualified.
- 3.2 To eliminate or minimize occupational exposure to blood and other potentially infectious body fluids, personal protective equipment shall be used.
- 3.3 IF the possibility exists that treatment and transportation of a patient from PBNP may be complicated by radioactive contamination,
THEN a fully equipped, controlled access emergency room shall be used at Aurora Medical Center - Manitowoc County.
- 3.4 IF in doubt concerning the severity of an injury or illness,
THEN seek the higher level of medical attention.
- 3.5 Do NOT move the injured/ill person(s) unless in an extremely high radiation area (exposures >100 rem may result in radiation sickness) OR if failure to move the person may result in a more serious injury.
- 3.6 IF event declared a mass casualty incident by offsite response personnel,
THEN coordinate all efforts with the EMS Chief Officer.

4.0 INITIAL CONDITIONS

An injured/ill person(s) needing medical assistance has been discovered at Point Beach Nuclear Plant, includes both protected and exclusion areas.

MEDICAL EMERGENCY

5.0 PROCEDURE

5.1 Slight Personal Injury/Illness

Not serious, but requiring **onsite medical attention** (i.e., Band-aid, small cuts where bleeding has stopped, splinters, bruises).

5.1.1 Report the injury to your supervisor.

5.1.2 Seek and receive appropriate first aid.

5.1.3 Ensure proper reporting is completed per Step 5.9.

5.2 Minor Personal Injury/Illness

Not serious but requiring **offsite professional medical attention** (i.e., larger cuts possibly requiring stitches but bleeding stopped, sprains, strains).

5.2.1 Report the injury to your supervisor.

5.2.2 **IF** contamination is not involved and it is between 0800 to 1700 Monday through Friday,
THEN after appropriate first aid, the injured/ill will be transported, by a supervisor from the injured/ill person's group, or a person designated by the DSS, to a local physician's office, or hospital, for treatment.

5.2.3 **IF** contamination is involved,
OR it is outside normal working hours,
THEN the injured/ill person(s) will be treated and transported to the Aurora Medical Center - Manitowoc County per Step 5.4.

5.2.4 Ensure proper reporting is completed per Step 5.9.

5.3 Serious Injury/Illness

Requiring **offsite emergency medical transportation** per Step 5.4 (i.e., trauma, heart attacks, heat stroke, unconsciousness, broken bones). The DSS shall ensure immediate care is provided and an ambulance is obtained for transport, radiological monitoring and control is implemented, and Security and Aurora Medical Center - Manitowoc County are apprised of the event.

MEDICAL EMERGENCY

5.4 Individual Discovering the Injured/Ill Person(s) Response

- 5.4.1 Immediately notify the Control Room at ext. 2911 and provide the following information:
- a. Nature and extent of the injury or illness
 - b. Specific location of person(s)
 - c. What is needed (i.e., ambulance, first aid supplies, CPR-qualified person, radiation protection personnel, etc.)
 - d. Name of the person(s)
 - e. Other emergency conditions present (i.e., fire, steam, etc.)
- 5.4.2 Perform necessary first aid to your level of training.

CAUTION

DO NOT MOVE THE INJURED/ILL PERSON(s), UNLESS:

- a. **The injured/ill person(s) is in an extremely high radiation field. (Be aware that exposures of 100-200 rem may result in radiation sickness and exposures in excess of ~300 rem may involve the risk of fatality to 50% of those exposed if medical treatment is not provided.) (Reference Step 6.10)**

OR

- b. **Failure to move the injured/ill person(s) will result in even more serious injury.**

- 5.4.3 Remain with the individual and keep them calm, if conditions permit.
- 5.4.4 Brief more qualified personnel on the person(s) condition and actions taken upon their arrival.

MEDICAL EMERGENCY

5.5 Duty Shift Superintendent Response (OSC Coordinator or Reentry Team Coordinator if TSC Activated)

Complete Attachment A, Duty Shift Superintendent Actions, to ensure:

- 5.5.1 Injured/ill person(s) is(are) receiving medical treatment.
- 5.5.2 A scene leader (with radio) reports to the area for command and control of the emergency. If declared a mass casualty incident, coordinate efforts with the offsite EMS Chief Officer assigned to the scene.
 - a. Identify safety equipment needed.
 - b. Evaluate potential areas for setup as triage, treatment areas, equipment staging areas, etc.
- 5.5.3 Radiation Protection personnel are assigned to the scene if radiological concerns are present.
- 5.5.4 Onsite personnel and outside agencies that will provide support to the emergency are contacted.
- 5.5.5 The person(s) family and supervisor are aware of the emergency.
- 5.5.6 The need for a four-hour report to the NRC has been assessed.
- 5.5.7 Documentation and follow-up are completed per Step 5.9.

5.6 Radiation Protection Supervisor, Specialist, and/or Technologist Response

- 5.6.1 If requested to report to the scene for radiological monitoring, complete Attachment B, Radiation Protection Actions - Onsite, to ensure:

NOTE: The medical care of the person(s) always takes priority over other actions (e.g., radiation protection, contamination control, area cleanup, etc.).

- a. Report to the scene with radiation monitoring instruments suitable for direct radiation readings of area and person(s).
- b. Administer first aid if qualified and not already in progress.

MEDICAL EMERGENCY

- c. Determine the magnitude of the radiological hazard (if any) and if the person(s) is contaminated.
 - **IF** extreme radiation exposure is being received, (>100 rem may result in radiation sickness),
THEN recommend that the person(s) be moved.
 - **IF** the injured/ill person(s) is receiving significant radiation exposure (i.e., may exceed administrative limits) and cannot be moved from the field,
THEN consider use of shielding to reduce exposure.
- d. Report the following information to the Control Room (or Reentry Team Coordinator in OSC, if activated):
 - Injured/ill person(s) is(is not) contaminated.
 - **IF** contaminated,
THEN provide the affected areas and highest appropriate value in cpm or mR/hr.
- e. Evaluate need to issue protective clothing and dosimetry to emergency medical technicians, based upon severity of medical injuries and scene conditions.
- f. Assist in radiological control aspects of handling the person(s) until they are safely within the ambulance.
 - Deconning if actions do not escalate medical condition.
 - Wrapping to prevent spread of contamination and escalation of medical condition.
- g. Route several Radiation Protection personnel to the Aurora Medical Center - Manitowoc County to assist with the radiological setup prior to the arrival of the person(s). On backshift and weekends, contact RP Duty and Call Supervisor.
- h. Accompany the injured/ill person(s) in the ambulance, providing contamination control for the person(s) and ambulance personnel, **IF** permitted by the Emergency Medical Technicians.

5.6.2 Complete Attachment **Error! Reference source not found.**, Radiation Protection Actions - Offsite, to ensure:

- a. Assist in the radiological setup of the hospital and personnel.
- b. Assist in the ongoing radiological monitoring and contamination control.

MEDICAL EMERGENCY

NOTE: As soon as possible, assure that the hospital emergency department hallways, ambulance garage, ambulance and equipment, plus facilities and equipment, have been decontaminated and released. The various areas shall be done separately from the others to expedite public access.

c. Perform clean release surveys at the hospital and for the ambulance.

5.7 Aurora Medical Center - Manitowoc County Personnel Response

5.7.1 **IF** the injured/ill person(s) is not contaminated, **THEN** he/she will be handled by standard Aurora Medical Center - Manitowoc County procedures.

5.7.2 **IF** the injured/ill person(s) is contaminated by radioactive material, **THEN** the Aurora Medical Center - Manitowoc County will implement their "Condition Alert-Nuclear" procedure to treat him/her.

5.8 Security Officers Response

Upon being notified that medical response personnel (EMTs/Ambulance/Nurse) will be arriving, the security officers will:

5.8.1 Determine the desired location(s) of the ambulance, and/or responding personnel.

5.8.2 Escort the ambulance and responding personnel to desired location(s).

5.8.3 Expedite ingress/egress of the ambulance and responding personnel.

5.8.4 If declared a mass casualty incident coordinate all security efforts with the offsite Security Personnel assigned to the site.

a. Ambulance staging areas and loading.

b. EMS Command Post.

5.9 General Administrative Issues

In case of injury, the DSS, Industrial Health & Safety Manager, injured/ill person(s) supervisor, group manager, or contractor supervisor shall perform administrative responsibilities in accordance with NP 1.9.2, Accident and Personal Injury Reporting; OSHA Form 200 Requirements; Industrial Safety, and NP 1.10.2, Accident, Injury and Illness Reporting.

MEDICAL EMERGENCY

6.0 REFERENCES

- 6.1 DCS 2.1.1, Requirements and Guidance for Immediate Notification to NRC/EPA of "Significant Events" at PBNP
- 6.2 EP 6.0, Emergency Measures
- 6.3 EP 7.0, Emergency Facilities and Equipment
- 6.4 EPMP 1.3, Routine Inventory of TSC, EOF, AEOF, JPIC and OSC Emergency Preparedness Supplies
- 6.5 EPMP-1.1b, Radiation Protection - Emergency Preparedness Quarterly Checklist
- 6.6 HPIP 3.51, Contamination Surveys
- 6.7 NP 1.9.2, Accident and Personal Injury Reporting; OSHA Form 200 Requirements; Industrial Safety
- 6.8 NP 1.10.2, Accident, Injury and Illness Reporting
- 6.9 NP 4.2.25, Release of Material, Equipment and Personal Items from Radiologically Controlled Areas
- 6.10 Regulatory Guide 8.29, Instruction Concerning Risks From Occupational Exposure, February 1996, Revision 1
- 6.11 Manitowoc County Emergency Medical Services Mass Casualty Response Plan

7.0 BASES

- B-1 10 CFR 50.47(b), Emergency Plans
- B-2 10 CFR 50.47, Appendix E.IV, Content of Emergency Plans

MEDICAL EMERGENCY

ATTACHMENT A
DUTY SHIFT SUPERINTENDENT ACTIONS

Initials/Time

1.0 Ensure injured/ill person(s) is(are) receiving first aid by two trained responders.

/

2.0 Assign one person (with portable radio) to report as a scene leader for command and control and to keep you apprised of the event (recommend an SRO).

/

NOTE: If the injured/ill person(s) is in a radiation or contaminated area where contamination cannot be evaluated and cannot be moved, then assume he/she is contaminated.

3.0 Call the Manitowoc County Sheriff's Department (9-911) to request an ambulance, if needed. Provide the following information:

3.1 Number of injured/ill persons: _____

3.2 Nature of the injuries: _____

3.3 Radiological status (circle one) Clean - Contaminated - Potentially contaminated

/

4.0 Contact PBNP Nurse, if onsite, to report to the scene. Provide information of the event.

/

5.0 Notify security if the nurse is responding and/or if an ambulance has been requested. Advise them to escort responding personnel to the scene and of potential radiological concerns.

/

6.0 IF radiological concerns are present,
THEN assign Radiation Protection personnel to implement Attachment B of this procedure and report to the scene.

/

7.0 IF the injured person will be transported contaminated, call the Aurora Medical Center - Manitowoc County ()
THEN inform them to implement their Condition Alert-Nuclear Procedure and an update them on the radiological status.

/

8.0 Notify the Plant Manager (TSC Manager if the TSC has been activated), and advise that injured/ill person's family and supervisor be notified of the injury.

/

9.0 IF the injured person is contaminated,
THEN notify the Manitowoc County Sheriff's Department and request the ambulance remain at the hospital until Radiation Protection personnel release the vehicle and its equipment.

/

10.0 Assess the need for a four-hour event report per DCS 2.1.1, Requirements and Guidance for Immediate Notification to NRC/EPA of "Significant Events."

/

11.0 Ensure Step 5.9 of the procedure for completion of General Administrative Issues is assigned as appropriate.

/

ROUTE COMPLETED FORM TO EMERGENCY PREPAREDNESS

MEDICAL EMERGENCY

ATTACHMENT B
RADIATION PROTECTION ACTIONS - ONSITE
Page 1 of 2

NOTE: The medical care of the person(s) always takes priority over other actions (e.g., radiation protection, contamination control, area cleanup, etc.)

	Initials/Time
1.0 Immediately report to the scene upon being contacted by the Control Room with radiation monitoring instruments suitable for direct radiation readings of area and person(s).	<u>/</u>
2.0 Administer medical treatment if qualified and first aid is not already in progress.	<u>/</u>
3.0 Survey the injured/ill person(s) and area for radiation and contamination, documenting the highest reading on the following page.	<u>/</u>
4.0 Contact the Control Room with the results of your surveys and affected areas of injured/ill person(s) and scene.	<u>/</u>
5.0 <u>IF</u> extreme radiation exposure is being received, (>100 rem may result in radiation sickness), <u>OR</u> failure to move the person(s) may result in a more serious injury, <u>THEN</u> recommend that the person(s) be moved.	<u>/</u>
6.0 <u>IF</u> the injured/ill person(s) is receiving significant radiation exposure (i.e., may exceed administrative limits) and cannot be moved from field, <u>THEN</u> consider use of shielding to reduce exposure.	<u>/</u>
7.0 Evaluate need to issue dosimetry and protective clothing to offsite medical response personnel, based on severity of injury and scene conditions.	<u>/</u>
8.0 Assist in radiological control aspects of handling the person(s) until they are safely within the ambulance.	
8.1 Deconning if actions do not escalate medical condition.	<u>/</u>
8.2 Wrapping with sheet, blanket, or plastic to prevent spread of contamination if medical condition prevents deconning.	<u>/</u>
9.0 Route several Radiation Protection personnel to the Aurora Medical Center - Manitowoc County to implement Attachment C, assisting with the radiological setup prior to the arrival of the injured/ill person(s). On backshift and weekends, contact on call RP Duty and Call Supervisor.	<u>/</u>
10.0 Accompany the injured/ill person(s) in the ambulance, providing contamination control for the person(s) and ambulance personnel, <u>IF</u> permitted by the Emergency Medical Technicians.	<u>/</u>

MEDICAL EMERGENCY

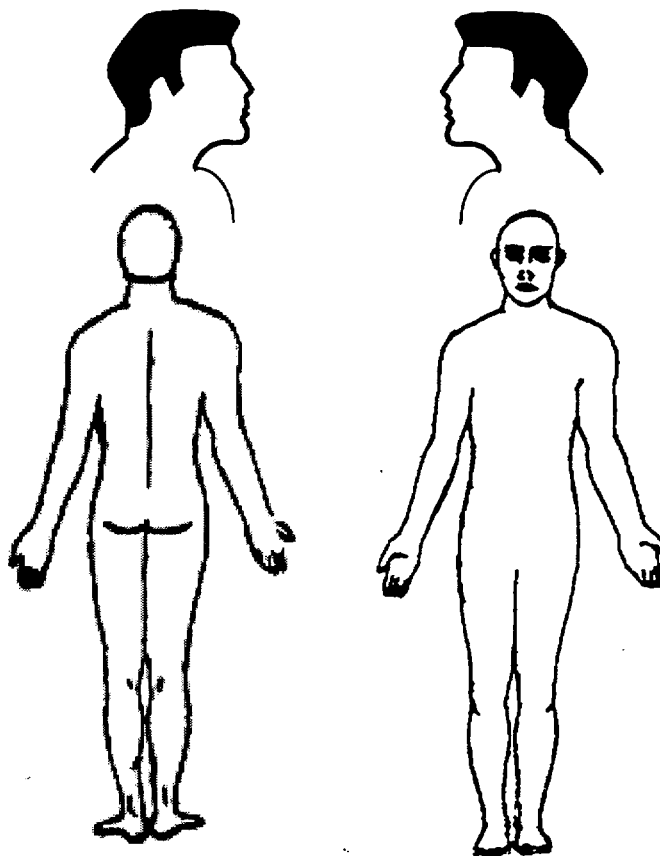
ATTACHMENT B
RADIATION PROTECTION ACTIONS - ONSITE
Page 2 of 2

NOTE: The medical care of the person(s) always takes priority over other actions (e.g., radiation protection, contamination control, area cleanup, etc.)

11.0 Injured/Ill Persons Name: _____ Date/Time ____/____/____
Employer: _____ Work Group: _____

12.0 Results of radiological survey of scene in cpm or mR/hr: _____
Comments: _____

13.0 Indicate wounds and/or contaminated areas in cpm or mR/hr:
Comments: _____



14.0 Potential for internal contamination? ☐ Yes ☐ No
Comments: _____

15.0 Describe actions taken to minimize the spread of contamination (i.e., decon, wrap, etc.):

ROUTE COMPLETED FORM TO EMERGENCY PREPAREDNESS

MEDICAL EMERGENCY

ATTACHMENT C
RADIATION PROTECTION ACTIONS - OFFSITE
Page 1 of 4

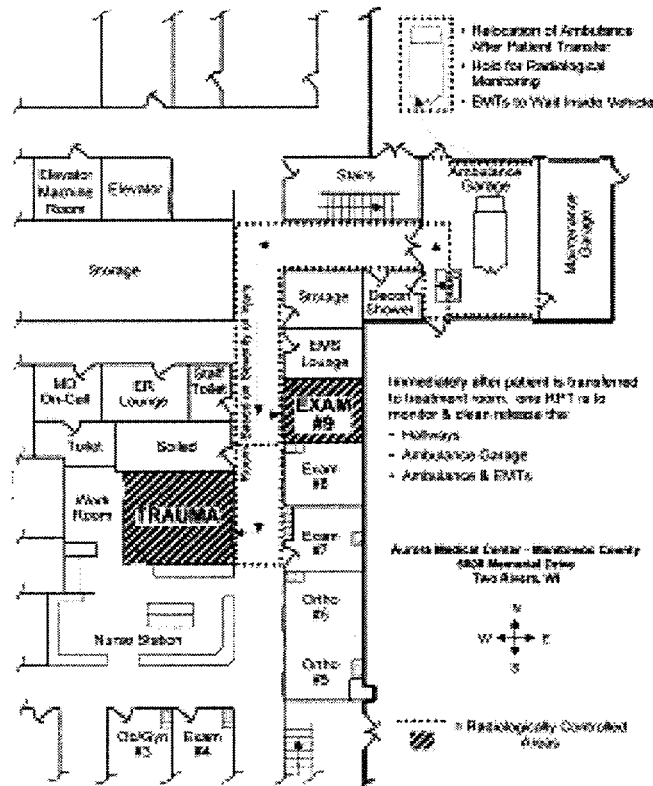
NOTE 1: The attending physician's orders must be followed and ONLY the physician is in direct charge of the situation. The medical care of the person(s) always takes priority over other actions (e.g., radiation protection, contamination control, area cleanup, etc.).

NOTE 2: As soon as possible, assure that the hospital emergency department hallways, ambulance garage, ambulance and equipment, plus facilities and equipment have been decontaminated and released. The various areas shall be done separately from the others to expedite public access.

Initials/Time

- 1.0 Proceed to the Aurora Medical Center - Manitowoc County. If possible, arrive before the ambulance.
- 2.0 Upon arrival, identify yourself to hospital personnel and provide setup assistance with contamination boundaries, postings and controls for the ambulance garage, emergency department hallways and emergency room.

/



NOTE: If ambulance garage is unavailable, alternate route is to park in the "ambulance relocation area" northwest of the ambulance garage. A radiologically controlled area should be set up there for patient transfer and entrance via the north door of the ambulance garage.

/

MEDICAL EMERGENCY

ATTACHMENT C
RADIATION PROTECTION ACTIONS - OFFSITE
Page 2 of 4

NOTE: PBNP personnel entering the emergency room should dress in the same protective equipment being worn by the hospital staff.

	Initials/Time
3.0 Issue dosimetry for hospital and plant personnel and ensure they have appropriate protective clothing.	<u>/</u>
4.0 Provide a radiological status of injured person to hospital personnel.	<u>/</u>
5.0 Assist in maintaining radiological and contamination controls for:	
5.1 Hospital personnel and equipment leaving the restricted area.	<u>/</u>
5.2 Injured/ill person(s) during treatment.	<u>/</u>
6.0 Upon transfer of the injured contaminated person into the emergency room, monitor, survey, and clean release the following areas per Step 8.0.	
6.1 Emergency Department hallways	<u>/</u>
6.2 Ambulance garage	<u>/</u>
6.3 Ambulance and ambulance personnel	<u>/</u>
6.4 Ambulance Relocation Area, if implemented.	<u>/</u>
7.0 Upon completion of medical treatment and transfer of the injured/ill person into another area, monitor, survey, and clean release the following areas per Step 8.0.	
7.1 Medical personnel and equipment	<u>/</u>
7.2 Emergency Room/Emergency department hallways	<u>/</u>
7.3 Other locations and equipment set up as radiological restricted areas during the treatment of the person(s)	<u>/</u>
8.0 Survey and Clean Release Guidelines	
8.1 Masslinn (treated cloth wipes)	
8.1.1 For large flat surface areas, the affected area may be wiped with masslinn. All areas where there is the potential for contamination must be wiped.	
8.1.2 The masslinn should be laid flat with the dirty side up for the survey.	

ATTACHMENT C
RADIATION PROTECTION ACTIONS - OFFSITE

Page 3 of 4

8.1.3 Count the masslinn using an open-window, pancake type probe sensitive to beta and gamma radiation. The measurement shall be made at a distance of approximately 1/2 inch and at a scan rate of less than 4 inches per second.

8.1.4 The area may be released as clean if the count rate from the masslinn is determined to be free from detectable radioactive contamination.

8.1.5 Fixed contamination levels must be \leq background (none detectable). (Reference NP 4.2.25)

8.2 Direct Frisk

8.2.1 Any surface area may be surveyed directly with a hand-held frisker which is sensitive to beta and gamma radiation.

8.2.2 The area may be released as clean if the count rate determined to be free from detectable radioactive contamination.

8.2.3 Fixed contamination levels must be \leq background (none detectable). (Reference NP 4.2.25)

8.3 Smear Survey

8.3.1 Any surface area may be surveyed indirectly using smears and a counting instrument.

8.3.2 The standard method described in HPIP 3.51, Contamination Surveys, for obtaining, documenting, and counting smears will be followed.

MEDICAL EMERGENCY

ATTACHMENT C
RADIATION PROTECTION ACTIONS - OFFSITE

Page 4 of 4

NOTE: Hospital staff will work with plant personnel to eliminate the biological hazard of the radioactive waste generated prior to disposal of the material as radioactive waste.

	Initials/Time
9.0 Collect any protective clothing and dosimetry that may have been issued to the ambulance EMTs and complete appropriate paperwork.	<u> / </u>
10.0 Bag and properly label all disposable and non-disposable contaminated items.	<u> / </u>
11.0 Notify the Rad Waste Supervisor of waste and quantity to ensure the immediate transport and proper disposal of contaminated materials.	<u> / </u>
12.0 Identify hospital and ambulance equipment which may require replacement below.	<u> / </u>
12.1 _____	
12.2 _____	
12.3 _____	
12.4 _____	
12.5 _____	
12.6 _____	
12.7 _____	
13.0 Comments _____	

_____	<u> / </u>

ROUTE COMPLETED FORM TO EMERGENCY PREPAREDNESS