Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02010

(Supersedes RA-EP-02010, R1)

Emergency Management

REVISION 02

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Effective Date: ~~1/8/99~~ 01/29/99

Procedure Classification:

X Safety Related

____ Quality Related

____ Non-Quality Related

LEVEL OF USE:

IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure establishes a reference aid for key Emergency Response Organization personnel that consolidates the action steps of each individual during the first phase of any emergency response. It is intended to supplement the individual's familiarity and compliance with the plan and implementing procedures by providing a memory key and guideline for the manager's initial responses.

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan
2.1.2 Corporate Emergency Response Plan

2.2 Implementation

2.2.1 NG-NA-00702, Potential Condition Adverse to Quality Reporting
2.2.2 NG-IS-00004, Fitness for Duty Program
2.2.3 RA-EP-00600, Emergency Facility and Equipment Maintenance Program
2.2.4 RA-EP-01500, Emergency Classification
2.2.5 RA-EP-01600, Unusual Event
2.2.6 RA-EP-01700, Alert
2.2.7 RA-EP-01800, Site Area Emergency
2.2.8 RA-EP-01900, General Emergency
2.2.9 RA-EP-02000, Medical Emergencies
2.2.10 RA-EP-02110, Emergency Notification
2.2.11 HS-EP-02230, Dose Assessment Center Activation and Response
2.2.12 RA-EP-02245, Protective Action Guidelines
2.2.13 RA-EP-02520, Assembly and Accountability
2.2.14 HS-EP-02530, Evacuation
2.2.15 HS-EP-02620, Emergency Exposure Controls and Potassium Iodide Distribution
2.2.16 RA-EP-02710, Reentry
2.2.17 RA-EP-02720, Recovery Organization
2.2.18 RA-EP-02800, Preparation and Transport of Contaminated Injured Personnel
2.2.19 RA-EP-02950, JPIC Activation and Response
2.2.20 DB-OP-00002, Operations Section Event/Incident Notifications and Actions
2.2.21 Davis-Besse Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 ALTERNATE EMERGENCY OPERATIONS FACILITY (AEOF) - A conference area outside the 10-mile EPZ, which is available to hold meetings between Davis-Besse emergency management personnel and offsite agency management personnel.

3.2 ESSENTIAL PERSONNEL - Personnel assigned specific Emergency Response Duties as identified in the DBNPS Emergency Plan (i.e., operations, fire brigade (FB), first aid team (FAT), radiation monitoring team (RMT), Team Leaders and members, etc.)

3.3 NONESSENTIAL PERSONNEL - Personnel who are not preassigned specific Emergency Response duties.

3.4 PAR - Protective Action Recommendation.

4.0 RESPONSIBILITIES

4.1 Emergency Director (Outside of the Control Room), Attachment 1, Emergency Management Guidelines for Emergency Director.

4.2 Emergency Plant Manager, Attachment 2, Emergency Management Guidelines for Emergency Plant Manager.

4.3 Emergency Offsite Manager, Attachment 3, Emergency Management Guidelines for Emergency Offsite Manager.

4.4 Company Spokesperson, Attachment 4, Emergency Management Guidelines for Company Spokesperson.

4.5 Emergency Assistant Plant Manager, Attachment 5, Emergency Management Guidelines for Emergency Assistant Plant Manager.

5.0 INITIATING CONDITIONS

This procedure is initiated upon notification of a classified emergency event at Davis-Besse Nuclear Power Station.

6.0 PROCEDURE

6.1 Activation

Upon notification of a classified event at Davis-Besse Nuclear Power Station, each member of the Emergency Response Organization identified below may refer to the appropriate attachment for their responsibilities.

6.1.1 Emergency Director (Outside of the Control Room), Attachment 1, Emergency Management Guidelines for Emergency Director.

6.1.2 Emergency Plant Manager, Attachment 2, Emergency Management Guidelines for Emergency Plant Manager.

6.1.3 Emergency Offsite Manager, Attachment 3, Emergency Management Guidelines for Emergency Offsite Manager.

6.1.4 Company Spokesperson, Attachment 4, Emergency Management Guidelines for Company Spokesperson.

6.1.5 Emergency Assistant Plant Manager, Attachment 5, Emergency Management Guidelines for Emergency Assistant Plant Manager.

7.0 FINAL CONDITIONS

Use of this procedure by emergency management personnel is no longer required when the emergency has been terminated.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 Emergency Director Turnover Sheet, ED-8122

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 None

Emergency Management Guidelines

For

Emergency Director (Outside Of The Control Room)

ALTERNATES: Emergency Plant Manager until the designated Emergency Director arrives.

As listed in Emergency Plan Telephone Directory, Section 3

DUTY LOCATION: Technical Support Center, or Emergency Control Center

PRIMARY DUTY: Overall coordination of Davis-Besse's response to any classifiable event.

NON-DELEGABLE RESPONSIBILITIES:

1. Emergency Classification.
2. Offsite Protective Action Recommendations.
3. Compliance with station procedures.
4. Safety and well being of station personnel.
5. Ordering a General Evacuation.

DELEGABLE RESPONSIBILITIES:

1. Emergency Dose Authorizations.*
2. Onsite use of Potassium Iodide by Company personnel.*

*Delegable ONLY to Emergency Plant Manager

DIRECT REPORTS:

1. Emergency Offsite Manager
2. Emergency Plant Manager
3. Company Spokesperson
4. Emergency Director Advisor

Response To Classified Events

This guideline is provided to assist in performing the various activities associated with an Emergency Response in the event of an incident at the Davis-Besse Nuclear Power Station. Refer to the appropriate emergency classification heading and carry out the actions identified under it.

Unusual Event RA-EP-01600

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. When notified of an Unusual Event (1111 on your pager), call the Computerized Automated Notification System to indicate you have been notified.

> NOTE C.
>
> The on-call Plant Manager will contact the Control Room, determine the status of the situation and will then contact you with the essential information.

C. When contacted by the Plant Manager, if practical, use the Emergency Director Turnover Data Sheet, ED 8122, to review each of the listed areas.

D. Review the actions being taken to resolve the situation and the projected course of the event.

> NOTE E.
>
> The Plant Manager's home, office and individual pager phone numbers are listed in the Emergency Plan Telephone Directory.

E. Exchange telephone numbers, pager numbers, and points of contact with the Plant Manager for further discussions as the situation develops.

F. No further action is required in response to an incident at this classification level.

Alert RA-EP-01700, Site Area Emergency RA-EP-01800 &
General Emergency RA-EP-01900

A. Upon being notified by pager of an Alert (2222 on your pager), Site Area Emergency (3333 on your pager), General Emergency (4444 on your pager) call the Computerized Automated Notification System to indicate you have been notified and provide the system with your estimated travel time (in minutes) to the Emergency Control Center.

B. Report to the Emergency Control Center (ECC).

C. Upon arrival at the ECC contact the Emergency Director for a briefing on the nature of the incident.

D. Discuss the situation with the Emergency Plant Manager and the Emergency Offsite Manager; verify the appropriate classification was made. In the event an improper classification was made, properly classify the event and carry out the correct procedures.

E. When you have been sufficiently briefed and assured that adequate staff has assembled as indicated by the Emergency Offsite Manager and Emergency Plant Manager, complete an Emergency Director Turnover Data Sheet, ED 8122, and inform the Emergency Director that you are assuming the position of Emergency Director. Announce to the following individuals that you have assumed the Emergency Director position (also direct a general announcement be made):

1. Emergency Plant Manager
2. Emergency Offsite Manager
3. Company Spokesperson

F. Direct the Emergency Offsite Manager to activate the Corporate Support group at the Perry Plant.

G. Notify the Senior Vice President - Nuclear of the incident and its potential at the earliest opportunity.

H. With the Emergency Offsite Manager, review the status of any Protective Action Recommendations made to offsite organizations. REFER TO RA-EP-02245, Protective Action Guidelines.

I. Consider delegating authority for emergency radiation dose and onsite use of Potassium Iodide to the Emergency Plant Manager. REFER TO RA-EP-02620, Emergency Exposure Controls and Potassium Iodide Distribution.

NOTE J.

Announcements that are intended for the emergency organization in the DBAB are to be made using the ERF Public Address system. Only the north end of the DBAB 1st floor is covered by this system. No information can be sent to the station using this system.

J. Focus your attention to the area of major concern by seating yourself in the facility (TSC or ECC) which is playing the pivotal role in response to the situation. Ensure that both the Emergency Plant Manager and Emergency Offsite Manager are aware of your location at all times.

K. Review status of JPIC with the Company Spokesperson.

L. Review the status of assembly within the Protected Area with the Emergency Plant Manager. REFER TO RA-EP-02520, Assembly and Accountability. REFER TO Attachment 6, Overview of Assembly/Evacuation/Accountability, for overview.

M. Perform evacuation duties, as necessary, in accordance with RA-EP-02530, Evacuation.

N. IF it becomes desirable or necessary to meet with offsite agency officials at a location outside the Plume Exposure Emergency Planning Zone (10-mile EPZ),
THEN direct that the EOM activate the Alternate Emergency Operations Facility.

O. As the Emergency Classification requires upgrading or downgrading (as indicated to you by either the Emergency Plant Manager or Emergency Offsite Manager) conduct a meeting with both the Emergency Plant Manager and Emergency Offsite Manager to review the appropriate classification and its impact on onsite and offsite activities underway. Direct the Emergency Offsite Manager to initiate the completion of the Initial Notification Form for your signature. REFER TO RA-EP-02110, Emergency Notification.

P. Periodically meet with the Emergency Plant Manager and Emergency Offsite Manager to review the situation and prognosis for the event.

Q. Evaluate the duration of the event, and arrange for relief staff as deemed appropriate. REFER TO Attachment 8, Guidelines for Shift Turnover. Assign an individual to coordinate this activity.

R. Periodically update the Senior Vice President - Nuclear.

S. IF evacuation of non-essential personnel was performed,
THEN, inform the Corporate Emergency Response Organization (CERO) of the offsite location that was selected. Coordinate use of company facilities with the CERO. As support is required, obtain assistance from the Corporate Planning Center.

T. Confer with offsite agency liaisons during the emergency and prior to entering recovery.

U. When the Emergency Plant Manager determines that the plant has been stabilized, consider reentry and recovery requirements. REFER TO RA-EP-02710, Reentry and RA-EP-02720, Recovery Organization

V. Direct that a Potential Condition Adverse to Quality Report be generated in accordance with NG-NA-00702, Potential Condition Adverse to Quality Reporting.

Emergency Management Guidelines

For

Emergency Plant Manager

ALTERNATES: As listed in Emergency Plan Telephone Directory, Section 3

DUTY LOCATION: Technical Support Center

PRIMARY DUTY: Coordination and conduct of:

1. Plant Operations
2. Plant Assessment
3. Emergency classification associated with plant parameters.
4. Onsite actions to mitigate and terminate the emergency event.
5. Provide input to protective action recommendations based upon plant parameters.

NON-DELEGABLE RESPONSIBILITIES:

1. IF delegated by the Emergency Director,
   THEN the responsibility of authorizing emergency dose and distribution of Potassium Iodide (KI) cannot be re-delegated.
2. Reentry operations into evacuated areas shall be approved by the Emergency Plant Manager.

DIRECT REPORTS:

1. Emergency Assistant Plant Manager
2. Emergency Radiation Protection Manager
3. TSC Engineering Manager
4. OSC Manager
5. Emergency Security Manager
6. Recovery Advisor.

Response To Classified Events

This procedure is provided as a guide to assist in performing the various activities associated with an Emergency Response in the event of an incident at the Davis-Besse Nuclear Power Station. Refer to the appropriate emergency classification heading and carry out the actions identified under it.

Unusual Event RA-EP-01600

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. Upon being notified of an Unusual Event (1111 on your pager), call the Computerized Automated Notification System to indicate you have been notified.

C. Contact the Control Room and discuss the nature of the incident with the Emergency Director (Shift Supervisor).

1. Review the existing plant conditions and verify that the appropriate Emergency Classification has been made.

2. Determine any need for additional manpower or logistical support that may aid the Emergency Director (Shift Supervisor) in correcting the situation.

3. Through discussion attempt to determine the length of time anticipated until downgrading is possible.

4. Using the Emergency Director Turnover Data Sheet, ED 8122, review each of the areas listed on the sheet with the Emergency Director (Shift Supervisor) and complete the form.

NOTE D.

The Davis-Besse Public Affairs Duty Officer (PADO) telephone number is found on the ED/EPM/EOM pocket call card and in the Emergency Plan Telephone Directory.

D. Call the Davis-Besse Public Affairs Duty Officer voice mail box and provide a brief summary of the event, and a point of contact for requesting additional information.

E. Contact the on-call Emergency Director and review the information outlined on the Emergency Director Turnover Data Sheet, ED 8122.

1. Review the actions being taken to resolve the situation and provide an estimate of how long the station will be in this emergency classification prior to downgrading.

2. Exchange telephone numbers and points of contact for future discussions as the situation develops.

F. Continue to monitor the progress of the situation through follow-up discussions with the Emergency Director (Shift Supervisor).

G. No further action is required in response to an incident at this classification level.

Alert RA-EP-01700, Site Area Emergency RA-EP-01800 &
General Emergency RA-EP-01900

A. Upon being notified of an Alert (2222 on your pager), Site Area Emergency (3333 on your pager), General Emergency (4444 on your pager), call the Computerized Automated Notification System to indicate you have been notified and provide the system with your estimated travel time (in minutes) to the Technical Support Center.

NOTE B.

The Davis-Besse Public Affairs Duty Officer (PADO) telephone number is found on the ED/EPM/EOM pocket call card and in the Emergency Plan Telephone Directory.

B. Call the Davis-Besse Public Affairs Duty Officer voice mail box and provide a brief summary of the event, and a point of contact for requesting additional information.

C. Report to the Technical Support Center (TSC).

D. Upon arrival at the TSC, contact the Control Room and discuss the nature of the incident with the Emergency Director using the Emergency Director Turnover Data Sheet, ED 8122, as a guide.

1. Determine the immediacy of the need to shift the responsibilities of the Emergency Director to either yourself or the Emergency Assistant Plant Manager in the absence of the on-call Emergency Director or one of his alternates.

a. If it is necessary to relieve the Shift Supervisor of the Emergency Director responsibilities and the Emergency Assistant Plant Manager has not arrived, proceed to the Control Room and relieve the Shift Supervisor as Emergency Director.

b. If the Emergency Assistant Plant Manager (EAPM) has arrived you may remain in the TSC, and the EAPM may relieve the Shift Supervisor as Emergency Director as needed.

c. If the on-call Emergency Director has been delayed, but adequate staffing has arrived to activate the TSC and ECC, then activate the TSC and ECC and relieve the Control Room of Emergency Director responsibilities.

d. The Emergency Director shall remain in the Control Room until TSC and ECC have been activated.

2. If you are not required to proceed to the Control Room, review the existing plant conditions and verify that the appropriate Emergency Classification has been made.

E. Upon the arrival of the Emergency Director and Emergency Offsite Manager, review the current status of the situation. Assist the Emergency Director in preparation for shifting the responsibilities from the Control Room.

F. Activation and management of the TSC is the responsibility of the TSC Engineering Manager. Upon being notified of the activation of the TSC by the TSC Engineering Manager, ensure that the following individuals are informed:

1. Emergency Director

2. Emergency Offsite Manager

3. Emergency Assistant Plant Manager

4. Emergency RP Manager

5. OSC Manager

NOTE F.6

Announcements that are intended for the emergency organization in the DBAB are to be made using the ERF Public Address system. Only the north end of the DBAB 1st floor is covered by this system. The Protected Area cannot be contacted using this system.

6. Make a general plant announcement.

G. With the activation of the TSC you are responsible for the coordination and conduct of all activities associated with plant operations. These responsibilities include:

1. Continuously monitoring plant conditions/radiological conditions and ensuring that the Emergency Director remains apprised of specific plant conditions which impact the Emergency Classification and Protective Measures (onsite and offsite).

2. Assuming the responsibility, if delegated by the Emergency Director, for authorizing emergency radiological dose in excess of 10 CFR 20 limits and also the distribution of Potassium Iodide to onsite personnel. These responsibilities may not be delegated to any other individual.

H. When directed by the Emergency Director, coordinate with the Emergency Security Manager to accomplish assembly and accountability of all personnel within the protected area. REFER TO Attachment 6, Overview of Assembly/Evacuation/Accountability for overview of these activities.

I. Notification of American Nuclear Insurers (ANI) is required at an Alert, Site Area and General Emergency classification. REFER TO Section 2 of the Emergency Plan Telephone Directory for contact names and telephone numbers. After notifying ANI, contact the Corporate Risk Department.

J. For events which involve damage to Davis-Besse property, advise Nuclear Electric Insurance. Refer to Section 2 of the Emergency Plan Telephone Directory for telephone numbers.

K. Periodically meet with the Emergency Director and Emergency Offsite Manager to review the status of the situation and progress toward resolution.

L. Periodically conference with the following individuals to review actions being implemented and to ensure a coordinated response by each group:

1. Emergency Assistant Plant Manager
2. Emergency RP Manager
3. TSC Engineering Manager
4. OSC Manager
5. Emergency Security Manager

M. Ensure that periodic updates are given to the onsite organization as appropriate, using the ERF PA system.

N. Ensure that the TSC Administrative Assistant maintains a log of all actions and decisions made during the course of the response.

O. You are responsible for determining when stabilization of plant conditions has occurred. REFER TO RA-EP-02710, Reentry, for guidance in this area. You are also responsible for informing the Emergency Director of conditions that support recovery.

Emergency Management Guidelines

For

Emergency Offsite Manager

ALTERNATES: As listed in Emergency Plan Telephone Directory, Section 3

DUTY LOCATION: Emergency Control Center

RESPONSIBILITIES:

1. Communications and information flow with corporate, offsite and regulatory agencies.
2. Overview of EALs associated with radiological releases.
3. Making recommendations to the Emergency Director concerning PARs.
4. Inputs to the Emergency Director concerning EALs and classification of the event.

DIRECT REPORTS:

1. NRC Liaison
2. ECC Operations Advisor
3. Dose Assessment Coordinator
4. Emergency Planning Advisor
5. Facilities Services Manager

Response To Classified Events

This guideline is provided to assist in performing the various activities associated with an emergency response in the event of an incident at the Davis-Besse Nuclear Power Station. Refer to the appropriate emergency classification heading and carry out the actions identified under it.

Unusual Event RA-EP-01600

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. Upon begin notified of an Unusual Event (1111 on your pager), call the Computerized Automated Notification System (CANS) to indicate you have been notified.

C. If you suspect that CANS is not functioning properly, direct an individual to go to the TSC Library and check CANS.

D. Contact the Emergency Plant Manager, review the items listed on the Emergency Director Turnover Data Sheet, ED 8122. If the Emergency Plant Manager cannot be contacted, then contact the Emergency Director in the Control Room.

E. Contact the on-call Emergency Planning Advisor:

1. Provide an update on the cause and status of the Unusual Event.

2. Request the on-call Emergency Planning Advisor contact Ottawa and Lucas County EMA officials and verify that initial notifications were received and any questions were answered.

F. Contact the Ohio Emergency Management Agency Duty Officer listed in Section 2 of the Davis-Besse Emergency Plan Telephone Directory and verify that the initial notifications were received and any questions answered.

G. Verify that the Senior Vice President - Nuclear has received follow-up information on the Unusual Event.

H. Continue to monitor the progress of the situation through follow-up discussions with the Emergency Director as the situation warrants.

I. Upon downgrading, contact the personnel that were called in Steps F and G and ensure any questions are answered and the situation is understood.

J. Send personnel to the station, as appropriate, to collect the various logs, records, reports, etc., for review.

Alert RA-EP-01700, Site Area Emergency RA-EP-01800 &
General Emergency RA-EP-01900

A. Upon being notified of an Alert (2222 on your pager), Site Area Emergency (3333 on your pager), General Emergency (4444 on your pager), call the Computerized Automated Notification System to indicate you have been notified and provide the system with your estimated travel time (in minutes) to the Emergency Control Center.

B. Report to the Emergency Control Center (ECC).

C. Contact the Emergency Plant Manager, review the items listed on the Emergency Director Turnover Data Sheet, ED 8122. If the Emergency Plant Manager cannot be contacted, contact the Emergency Director in the Control Room.

D. Verify the minimum required ECC staffing in the following functional areas:

1. Emergency Offsite Manager
2. Emergency Planning Advisor
3. Dose Assessment Coordinator and Dose Assessment Staff
4. NRC Liaison
5. State and County Communicator

E. Declare the ECC activated when minimum staffing has arrived, the offsite communication links are functioning, and the current plant situation is understood.

F. Make the following or similar announcement on the Emergency Response Facility Public Address (ERF PA) System:

"THE EMERGENCY CONTROL CENTER IS ACTIVATED AT (TIME). (NAME) IS THE EMERGENCY OFFSITE MANAGER."

G. Notify the Emergency Assistant Plant Manager of ECC activation.

H. Monitor the status of key ECC tasks by using the Problem Analysis Board, as needed.

I. As appropriate, direct the Emergency Facility Services Manager or assigned individual to communicate with the supplementary JPIC personnel which assemble in the Energy Education Center (EEC) during normal working hours. Consider having the EEC establish a communicator on the Public Information Loop Telephone System.

J. Periodically conduct briefings with personnel in the ECC and Dose Assessment Center on emergency status. Use the Emergency Director Turnover Data Sheet, ED 8122, for information, as applicable.

K. Contact the Perry Plant Control Room and advise them that Davis-Besse is in a classifiable emergency and request that they activate their corporate support group. Provide them an ECC phone number to be used as a contact phone number when they have established their organization. Typically, this will be the Policy Loop Communications phone number.

L. When advised by the Dose Assessment Coordinator that a release is in progress or imminent, coordinate isolation of the DBAB ventilation and water supply with the Emergency Facility Services Manager.

1. Announce "THERE WILL BE NO EATING, DRINKING, SMOKING OR CHEWING UNTIL FURTHER NOTICE" over the ERF PA system, and ensure the JPIC is notified.

2. Make an ERF PA announcement to use water sparingly while the potable water is isolated.

3. Advise the Emergency Director to relocate the JPIC, if it is onsite.

M. Assist in determining an evacuation route to the offsite assembly area in accordance with RA-EP-02520, Assembly and Accountability.

N. Ensure a Davis-Besse Technical Liaison arrives at the state and both county EOCs.

O. Review protective actions with the Dose Assessment Coordinator and make recommendations to the Emergency Director, as necessary, in accordance with RA-EP-02245, Protective Action Guidelines.

P. Ensure the NRC Liaison uses the NRC Event Notification Worksheet, ED 7843, to inform the NRC of any change in emergency classification in accordance with DB-OP-00002, Operations Section Event/Incident Notifications and Actions.

Q. When directed by the Emergency Director to establish the Alternate Emergency Operations Facility (AEOF), perform the following:

1. Notify the Bay Shore management that the Alternate Emergency Operations Facility (AEOF) is being activated by contacting Bay Shore Security. Notify the Emergency Security Manager in the TSC that the AEOF is being activated and direct him/her to make appropriate arrangements to address AEOF security needs.

2. Inform the offsite authorities that the AEOF is being established at the Bay Shore Power Station Training Center.

3. Determine which functional areas from the ERO should attend this conference. As a minimum, it is suggested that the following functional areas be included:

   - Emergency Director
   - Emergency Offsite Manager
   - Radiation Protection Management
   - Operations Management
   - Technical Communicator

4. Use the Emergency Plan Telephone Directory to call out the desired additional personnel and direct them to report to the Alternate EOF to consult with offsite officials. REFER TO Attachment 7, AEOF Activation and Operation to set up the facility.

5. Notify the Company Spokesperson and the JPIC Manager that the Alternate EOF is being established.

6. Begin collecting information and data to fax to the AEOF once it is activated.

R. When notified that an NRC Incident Response Team (IRT) will be dispatched.

1. Advise the following individuals:

   Emergency Director
   Emergency Plant Manager
   Company Spokesperson
   Emergency Security Manager

2. Direct the Emergency Facilities Services Manager to set up NRC work areas.

   NOTE R 3.

   Personnel who are being called in shall comply with NG-IS-00004, Fitness for Duty Program guidelines.

3. Call in additional personnel as needed to prepare a technical briefing for the NRC and to perform support and liaison activities for the IRT.

S. Ensure a release pathway diagram and plume exposure footprint are faxed to the State and both county EOCs, as appropriate.

T. Assist the Emergency Director in assessing the need for and implementing a shift turnover, if needed.

U. If radiation monitoring assistance is needed, then request the corporate support group:

1. Contact appropriate utilities in accordance with the Mutual Assistance Agreement REFER TO the Emergency Plan Telephone Directory, Section 2.

2. Contact the Department of Energy Radiological Assistance Program. REFER TO the Emergency Plan Telephone Directory, Section 2.

V. If assistance is requested for bringing personnel or vehicles to the site:

1. Plan an entry route considering wind direction, release condition, and road blocks.

2. Arrange for vehicles, if needed, through the corporate support group.

W. Request that the Dose Assessment Coordinator assess radiological conditions in preparation for Recovery activities.

X. Direct deactivation of the ECC when conditions warrant, including:

1. The Emergency Director and Emergency Plant Manager agree that continued offsite dose assessment and Protective Action functions are no longer necessary for responding to the existing plant conditions.

2. Prior to announcing the deactivation, the Company Spokesperson shall be fully briefed on plant status and planned recovery actions.

Y. Instruct ECC staff to collect all pertinent material for documentation, and return their areas to pre-emergency status.

1. All equipment and supplies have been replaced in accordance with RA-EP-00600, Emergency Facility and Equipment Maintenance Program.

2. Electrical equipment has been de-energized, as appropriate.

Z. Review ECC records for completeness.

AA. Perform assigned recovery duties in accordance with RA-EP-02720, Recovery.

Emergency Management Guidelines

For

Company Spokesperson

ALTERNATES: As listed in Emergency Plan Telephone Directory, Section 3

DUTY LOCATION: Joint Public Information Center (JPIC)

PRIMARY DUTIES:

1. Senior management of Emergency Public Information.
2. Coordinate company-related news information with official offsite agencies.
3. Confer with Emergency Director - plant status.
4. Confer with JPIC Manager - media interests.
5. Review DBNPS information gathered by the JPIC Manager and the JPIC Communicator
6. Provide information concerning Davis-Besse status to the public and media representatives.
7. Approve company-related news release information.

DIRECT REPORT: JPIC Manager

Response To Classified Events

This guideline is provided to assist in performing the various activities associated with an Emergency Response in the event of an incident at the Davis-Besse Nuclear Power Station. Refer to the appropriate emergency classification heading and carry out the actions identified under it.

Unusual Event RA-EP-01600

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. Upon being notified of an Unusual Event (1111 on your pager), call the Computerized Automated Notification System to indicate you have been notified.

> NOTE C.
>
> The Davis-Besse Public Affairs Duty Officer (PADO) voice mail box telephone number is found on the Company Spokesperson pocket call card and in the Emergency Plan Telephone Directory.

C. Call the Davis-Besse Public Affairs Duty Officer voice mail box and provide a brief summary of the event, and a point of contact for requesting additional information.

Alert RA-EP-01700, Site Area Emergency RA-EP-01800, & General Emergency RA-EP-01900

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. Upon notification of an Alert (2222 on your pager), Site Area Emergency (3333 on your pager), or General Emergency (4444 on your pager), call the Computerized Automated Notification System to indicate you have been notified and provide the system with your estimated travel time (in minutes).

C. Proceed to the offsite Joint Public Information Center (Edison Club) and upon arrival:

1. Sign in on staffing board.

2. Initiate a personal log beginning with arrival time.

D. Activation:

1. Discuss the current emergency classification and overall plant status with the Emergency Director.

2. Discuss with the JPIC Manager the emergency status based on information from the Emergency Director Turnover Data Sheet, ED 8122.

3. Review with the JPIC Manager and/or Public Affairs Duty Officer news releases and media notifications made thus far.

NOTE D.4

Prior to the arrival of governmental Public Information Officers (PIOs), the JPIC may serve as a company news center.

4. Ensure that information (e.g. News Releases, notification logs) regarding Emergency Public Information activities prior to JPIC activation have been transmitted to the appropriate facilities. Responding news agencies should be notified that the JPIC is being activated.

5. Receive notification from the JPIC Manager that the facility is ready to activate. Verify that governmental PIOs are aware that the JPIC is ready to activate.

6. Declare the JPIC activated.

7. Notify the Emergency Director of the time the JPIC was declared activated.

8. Announce that the JPIC is activated. This means the JPIC has assumed primary responsibility for emergency public information activities.

E. Emergency Actions

1. Coordinate with other PIOs and the JPIC Manager to establish a schedule for news briefings. Ensure changes to the schedule are announced whenever the pace of emergency developments changes significantly.

2. Review each news release prepared by the JPIC Writer for overall accuracy, clarity and style, and approve releases prior to distribution to the media.

3. Confer with the PIOs prior to each news briefing to exchange and compare information and to determine the most appropriate sequence of presentation.

4. Provide public information on behalf of the Company to the news media at the JPIC.

   a. Public statements may be based on news release content.

   b. Respond to inquiries on facts, events, and actions involving the Company, its personnel, and its property.

   c. DO NOT speculate on the causes or possible consequences of the emergency; focus on the presentation of current, factual information.

   d. DO NOT discuss public protective actions or activities of responding governmental agencies; refer inquiries on these subjects to the appropriate governmental PIOs.

5. Provide interviews, as arranged by the JPIC Manager. The Audio/Visual Coordinator should video tape one-on-one interviews.

6. Respond to inquiries from Nuclear Energy Institute.

7. Provide information copies of news releases to the Emergency Director after approval.

F. Termination of Emergency Conditions

1. IF the Company Spokesperson is considering deactivation of the JPIC, THEN, confer with the JPIC Manager to determine whether news media interest is within normal public relations capabilities.

   a. The JPIC shall NOT be deactivated unless all PIOs agree that they NO longer need the JPIC to carry out emergency public information activities.

   b. Inform the Emergency Director of the deactivation discussion with the PIOs.

   c. When the Emergency Director approves deactivation of the JPIC, commence deactivation.

2. During recovery activities, the JPIC may be designated to support media center activities.

G. Perform recovery duties in accordance with RA-EP-02720, Recovery.

Emergency Management Guidelines

For

Emergency Assistant Plant Manager

ALTERNATES: As listed in Emergency Plan Telephone Directory, Section 3

DUTY LOCATION: Control Room Shift Supervisor's Office

PRIMARY DUTY:

1. Coordination of Control Room response to the emergency situation.
2. Liaison between Control Room and TSC personnel.
3. Advisor to the Emergency Plant Manager on plant status and trends.
4. Provide input for protective action recommendations and emergency classification changes

DIRECT REPORTS:

1. Shift Supervisor
2. Shift Manager (Shift Technical Advisor)
3. Control Room Communicator

Response To Classified Events

This procedure is provided as a guide to assist in performing the various activities associated with an Emergency Response in the event of an incident at the Davis-Besse Nuclear Power Station. Refer to the appropriate emergency classification heading and carry out the actions identified under it.

Unusual Event RA-EP-01600

A. IF a meaningless "Group" pager display appears on your pager,
THEN call the Computerized Automated Notification System to verify that an emergency does not exist at the station.

B. Upon being notified of an Unusual Event (1111 on your pager), call the Computerized Automated Notification System to indicate you have been notified.

C. Contact the Control Room and discuss the nature of the incident with the Emergency Director (Shift Supervisor).

1. Review the existing plant conditions and verify that the appropriate Emergency Classification has been made.

2. Determine any need for additional manpower or logistical support that may aid the Emergency Director (Shift Supervisor) in correcting the situation.

3. Through discussion attempt to determine the length of time anticipated until downgrading is possible.

4. Using the Emergency Director Turnover Data Sheet, ED 8122, review each of the areas listed on the sheet with the Emergency Director (Shift Supervisor) and complete the form.

Alert RA-EP-01700, Site Area Emergency RA-EP-01800 & General Emergency RA-EP-01900

A. Upon being notified of an Alert (2222 on your pager), Site Area Emergency (3333 on your pager), General Emergency (4444 on your pager), call the Computerized Automated Notification System to indicate you have been notified and provide the system with your estimated travel time (in minutes) to the Shift Supervisor's Office.

B. Report to the Control Room (CTRM) and obtain a briefing from the onshift staff.

NOTE C.

The NRC telephone, CTRM Communicator telephone, headsets, and emergency forms are stored in sealed boxes underneath the Shift Supervisor's Desk.

C. Upon arrival at the CTRM, establish communications with the Technical Support Center (TSC) and discuss the nature of the incident with the Emergency Plant Manager.

1. Determine the immediacy of the need to shift the responsibilities of the Emergency Director to either yourself or the Emergency Plant Manager in the absence of the on-call Emergency Director or one of his alternates.

   a. When you arrive in the Control Room area, offer to assume the responsibilities of Emergency Director from the Shift Supervisor.

   b. When the TSC and ECC have been activated, shift the Emergency Directory responsibilities to the Emergency Director or in his absence the Emergency Plant Manager.

   c. The Emergency Director shall remain in the Control Room until TSC and ECC have been activated.

2. Review the existing plant conditions and verify that the appropriate Emergency Classification has been made. REFER TO RA-EP-01500, Emergency Classification.

NOTE C.3
Personnel who are being called in shall comply with NG-IS-00004, Fitness for Duty Program guidelines.

3. Call in an additional shift of operators to assume the fire brigade and first aid team duties, and to perform other duties as directed by the OSC Manager. Extra operators do not have to be present to consider the OSC activated.

4. Keep the Emergency Plant Manager advised of plant operations, actions performed by Operations personnel, changes in plant parameters, and potential changes in classification and problems.

5. Ensure that the members of the normal plant organization assume duties in the onsite Emergency Organization.

6. Review staffing levels with the Emergency Plant Manager and, if necessary, call in additional individuals.

7. Ensure that first aid and medical treatment is given to injured personnel:

   a. Station personnel, trained in first aid, shall assist in accordance with RA-EP-02000, Medical Emergencies.

   b. RA-EP-02800, Transport of Contaminated Injured Personnel, shall govern the handling of contaminated injured personnel needing offsite medical care.

D. Periodically conduct tele-conferencing with the Emergency Plant Manager and the OSC Manager to review actions being implemented and to ensure a coordinated response.

E. Ensure that periodic updates are given as appropriate, using the GaiTronics system.

F. Ensure that the Shift Supervisor or his designee maintains a log of all actions and decisions made during the course of the response.

G. Once the emergency classification has been reclassified to an Unusual Event or terminated, the presence of the Emergency Assistant Plant Manager in the Control Room is no longer required.

H. Participate in recovery activities in accordance with RA-EP-02720, Recovery Organization, as necessary.

Required Actions

Event	Essential Personnel	Non-Essential Personnel within the: Protected Area	Non-Essential Personnel within the: Owner Controlled Area	Optional Actions
Unusual Event	Notification	Notification	Notification	1. Staffing of the OSC 2. Limited evacuation of affected areas 3. Assembly of the Protected Area
Alert	Respond to assigned emergency response facility	Assembly	Notification	1. Assembled personnel options: a. Keep personnel assembled b. Evacuate the Protected Area c. Return personnel to work
Site Area Emergency	Respond to assigned emergency response facility	Evacuate and perform accountability of the Protected Area	Assembly	1. Assembled personnel options: a. Keep personnel assembled b. Site evacuate
General Emergency	Respond to assigned emergency response facility	Site Evacuation, perform Protected Area Accountability if not performed earlier	Site Evacuation to offsite assembly area	1. Assembled personnel options: a. Keep personnel assembled b. Send personnel home

AEOF ACTIVATION AND OPERATION

AEOF Setup and Activation

A. Locate 5 company telephone lines, record their individual telephone numbers and designate them as follows:
    - 1 - Technical Loop Communicator
    - 1 - Senior Management Phone
    - 3 - General usage telephone
B. Locate the Fax machine and record the telephone number.
C. Refer to the Emergency Plan Telephone Directory, Emergency Facility Tab, and fax the AEOF telephone numbers to the Emergency Control Center, Public Relations fax machine.
D. AEOF Technical Loop Communicator shall:
    - Utilize the Emergency Plan Telephone Directory to access the Technical Data Loop and establish communications with the Davis-Besse Emergency Response Facilities.
    - Once the Technical Data Loop Telephone is established maintain the circuit open.
    - Request that the Emergency Control Center fax current data on the following issues:
        * Offsite release values, effected sub-areas and projected duration
        * Plant status
        * Plant safety system status
        * Recent Joint Public Information Center (JPIC) news releases.
E. Coordinate with Bay Shore Staff to establish a parking area for arriving agencies.
F. Setup the senior manager's speaker phone and obtain a briefing from the Emergency Director (ED) or his/her representative.
G. Setup the large classroom in a "roundtable" arrangement
H. Setup the overhead projector and verify operations
I. Setup signs to direct individuals to Alternate EOF
J. Advise Emergency Director (ED) that the AEOF is activated

AEOF ACTIVATION AND OPERATION (Cont.)

Briefing Guidelines

A. Use tent cards to identify each individual by name and organization.

B. Respond only to utility actions and responses to the event. Direct non-utility questions to the appropriate individual/organization

C. Designate an individual to serve as a scribe.

- Record key issues, questions and request for additional information.
- Maintain a log of attendees.

D. Periodically brief the Emergency Director of AEOF activities.

E. Call in additional personnel as required to maintain facility operations.

Deactivation

A. Review all AEOF records for completeness and accuracy.

B. Remove all AEOF signs and return equipment to the AEOF storage locker. REFER TO RA-EP-00600, Emergency Facilities and Equipment Maintenance Program, for AEOF cabinet inventory.

C. Complete the RA-EP-02720, Recovery, Attachment 1, Deactivation Report.

D. Collect and forward all AEOF records to the Emergency Preparedness Unit.

GUIDELINES FOR SHIFT TURNOVER

The activities of this checklist are to be coordinated by an individual assigned by the Emergency Director. Evaluate the event duration. For events that have an expected duration of greater than four hours a relief shift of ERO staff should be assembled.

A. Considerations for the following issues should be made:

1. Establishment of an ERO shift rotation schedule.

2. Selection of a shift turnover time.

3. Determine if special instructions are required to be communicated to the personnel being called out, e.g. duration of shift and if they are going to be required to stay at their assigned facility, access route/requirements, radiological controls, assembly points, etc.

4. As appropriate, establish an offsite assembly point for relief personnel and make provisions for a caravan or a bus to bring personnel to the station. If an offsite assembly point is selected, ensure the ECC has made offsite agencies aware of the assembly point location and the access route to the station.

5. Determine how or if individual dosimeter will be retrieved from off going personnel and make provisions for issuing dosimeters to relieving personnel.

> NOTE A.6
>
> Personnel who are being called in shall comply with NG-IS-00004, Fitness for Duty Program guidelines.

6. Assign an individual to coordinate the call-out. Normally, the Emergency Facility Services Manager.

7. Establish a phone number(s) that ERO personnel can call for offsite information.

B. The facility should prepare for shift turnover by:

1. Directing each member of your staff to review their records/logs and ensure completeness.

2. Review facility status boards for accuracy and update as appropriate.

3. Assemble a list of agencies which you are in communications with, and identify any outstanding or follow-up issues.

4. Evaluate the need to assemble your staff following turnover to debrief or discuss special instructions.

5. Brief staff as to turnover expectations. Ensure that they understand which route to take when leaving the station, and when they are expected to return. Provide personnel with a Company telephone number to obtain information or to contact the ERO.

C. Coordinate turnover such that key facility activities are not disrupted, and important evolutions such as emergency classification or protective action changes are completed prior to beginning turnover. Each member of your staff should turnover their responsibilities to the oncoming individual by:

1. As applicable, reviewing any logs or records maintained by their position.

2. Review the information on the status boards.

3. Discuss evolutions that have occurred during the past shift.

4. Discuss classification level, special evolutions, and any onsite protective actions.

5. As appropriate, discuss pending evolutions.

6. Ask if there are questions.

7. Advise ERO supervisor that they have been relieved.

D. Personnel who have completed turnover should ensure that they have:

1. Signed into the facility organization status board.

2. Have been issued a TLD and appropriate dosimeter, if necessary.

3. As appropriate, make an entry into your logbook indicating that they are now responsible for the position. The entry should include name, ERO title, time and date that the turnover took place, and any other pertinent details regarding the turnover.

COMMITMENTS

Section	Reference	Comments
Attachment 5	TERMS O 05685	Station management presence in the Control Room during TSC activation.
Attachment 1, Attachment 2	TERMS O 13454	Who, by title, has authority to authorize emergency exposures in excess of regulatory limits.
Attachment 1	TERMS O 13612	List of delegable and non-delegable responsibilities of the Emergency Director.
Attachment 1, Attachment 2, Attachment 5	TERMS Q 02855, TERMS Q 02856	Orderly transfer of authority
Attachment 2, Section C, and Attachment 5, Section C	TERMS Q 02857 TERMS Q 02858	Relieving the Emergency Director in the Control Room
Entire Procedure	TERMS Q 03111	Emergency Organization and individual authority
Attachment 7	TERMS O 18661	Alternate EOF

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02110

(Supersedes RA-EP-02110, R1)

Emergency Notification

REVISION 02

DOCUMENTATION MANAGEMENT
CONTROL COPY
NO. 11665

Prepared by: Patricia J Smith 4/30/01
Date

Sponsor: David H. Lockwood 5-7-01
Manager - Regulatory Affairs Date

Approved by: S Worley 5/30/01
Director - Support Services Date

Approved by: L W Bryndel 6/1/01
Plant Manager Date

Effective Date: 6/18/01

Procedure Classification:

X Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:
STEP-BY-STEP

LIST OF EFFECTIVE PAGES

Page	Change No.
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Page	Change No.

Page	Change No.

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1.0 PURPOSE

To provide guidelines for notifying the Emergency Response Organization and offsite agencies in accordance with the Davis-Besse Nuclear Power Station Emergency Plan.

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

2.2.1 DB-OP-00002, Operations Section Event/Incident Notifications and Actions

2.2.2 DBNPS Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 COMPUTERIZED AUTOMATED NOTIFICATION SYSTEM (CANS) - A computer assisted system that has the following capabilities:

3.1.1 Contacting emergency response personnel through the use of pagers or the telephone system.

3.1.2 Accepting calls from authorized emergency responders.

3.1.3 Maintaining an updated list of Emergency Responders that have or have not responded.

3.2 EMERGENCY RESPONSE ORGANIZATION (ERO) - The organization formed and trained to respond to various emergencies according to requirements in the DBNPS Emergency Plan.

3.3 EMERGENCY RESPONSE ORGANIZATION ON CALL REPORT - A weekly report, which lists the schedules of On Call, On Coming and Standby ERO Responders.

3.4 INTEGRATED ON CALL REPORT - A weekly report which lists positions that have on call Plant Duty Responsibilities along with their On Call ERO Responsibilities.

3.5 ON CALL TEAM - Personnel in the ERO who are designated as the primary responders.

3.6 ON COMING TEAM - Personnel in the ERO who are designated as the first alternate to the On Call Team responders.

3.7 SCENARIO ACTIVATION PASSWORD - Numbers assigned to designated individuals used to gain access to CANS.

3.8 STANDBY TEAM - Personnel in the ERO who are designated as the second alternate to the On Call Team responders.

3.9 INITIAL NOTIFICATION FORM - The form used when notifying the State and Counties of an emergency at the Davis-Besse Nuclear Power Station. The Initial Notification is also used when changing either the level of classification or the protective action recommendations.

3.10 PERIODIC UPDATE FORM - The form used when updating the State and Counties of the status of an emergency at the Davis-Besse Nuclear Power Station.

4.0 RESPONSIBILITIES

4.1 The Emergency Director shall be responsible for ensuring that Emergency Response Organization notification and offsite notifications are performed in accordance with this procedure.

4.2 The Shift Manager or designated alternate shall be responsible for the activation of CANS upon declaration of an emergency or drill classification.

4.3 The Supervisor - Emergency Preparedness shall be responsible for:

4.3.1 Review of documentation created from this procedure.

4.3.2 The corrective actions of any deficiencies found with the equipment.

5.0 INITIATING CONDITIONS

5.1 This procedure shall be activated when any of the following have been declared:

5.1.1 Unusual Event

5.1.2 Alert

5.1.3 Site Area Emergency

5.1.4 General Emergency

6.0 PROCEDURE

NOTE 6.1

° The priority for performing notification is as follows, however, steps may be performed concurrently:

1. Notification of ERO using CANS - Section 6.1.
2. Notification of State and Counties - Section 6.2.
3. Notification of ERO using Sections 6.3 and 6.4.
4. Notification of NRC - Section 6.5.

° Initial notification of the State and Counties or a change in Protective Actions is required within 15 minutes of declaration of an emergency or change in classification.

6.1 Notification of the Emergency Response Organization Using the Computerized Automated Notification System (CANS)

6.1.1 IF the individual activating CANS is not a(n):

° Shift Manager,
° Emergency Assistant Plant Manager,
° Unit Supervisor,
° Shift Engineer,
° Supervisor – Security Shift
° Alarm Station Operator
° Emergency Planning Advisor,
° Emergency Offsite Manager, or
° ECC Communications Equipment Operator

THEN obtain a scenario activation password from one of these personnel.

6.1.2 To activate CANS, the Shift Manager or designee shall:

NOTE 6.1.2.a

° After CANS has been activated for an Alert, Site Area Emergency, or a General Emergency, use the manual ERO group page to notify the ERO of a change in emergency classification. Step 6.3

a. IF upgrading an emergency classification from an Unusual Event, THEN activate CANS. GOTO step 6.1.2.c.

b. IF reclassifying a previously declared drill or emergency, THEN manually activate the ERO group page. GOTO Step 6.3.

c. Obtain the Emergency or Drill Classification from the Emergency Director.

d. Obtain the CANS access number from the Immediate Notification Numbers section of the Emergency Plan Telephone Directory.

e. Dial the CANS number from a touch tone telephone line:

1. IF you fail to contact CANS after two attempts,
THEN manually activate the ERO group page. GOTO Step 6.3.

f. REFER TO the CANS Activation Flow Chart in the Immediate Notification Numbers section of the Emergency Plan Telephone Directory for activation.

NOTE 6.1.2.g

Within 10 minutes the pager located in the Control Room or CAS should activate with displays of the selected classification code.

g. Wait for the Control Room or CAS pager to activate with the proper display:

1. If the Control Room and the CAS pager fail to respond, then contact the On Call Emergency Offsite Manager. (See the Integrated On Call Report for number.)

2. Upon contact inquire if their pager has received the proper Emergency or Drill Classification Code.

3. IF CANS is not working,
THEN manually activate the ERO group page. GOTO Step 6.3.

h. Review the CANS Fax to ensure the ERO positions are being filled.

1. IF the positions are not being filled, THEN contact the On Call Emergency Offsite Manager (see the Integrated On Call Report for numbers).

6.2 Notification of the State and Counties

NOTE 6.2

Initial notification of the State and Counties or a change in Protective Actions is required within 15 minutes of the declaration of an emergency or a change in classification.

6.2.1 When making an initial notification, the Shift Manager or designee shall fill out an Initial Notification form (DBEP-010).

NOTE 6.2.2

Periodic updates are required as conditions change or hourly, as a minimum, unless the offsite agencies agree to forgo them.

6.2.2 When making a periodic update, fill out a Periodic Update form (DBEP-009).

6.2.3 Review and obtain the Emergency Director's approval on a Davis-Besse Emergency Notification Coversheet (DBEP-012).

6.2.4 Activate the Davis-Besse 4-Way Ringdown Circuit (4-Way). (Detailed instructions are contained in the Emergency Plan Telephone Directory).

a. If the 4-way is not operable, then obtain telephone numbers for the offsite agencies in the Immediate Notification section of the Emergency Plan Telephone Directory. Contact should be established in the following order:

1. Ottawa County
2. Lucas County
3. State of Ohio

6.2.5 As agencies answer, identify yourself by name and facility (Control Room, ECC) and record the following:

a. The agency notified.

b. Time of contact.

c. If the 4-way was used when making the notification.

6.2.6 Transmit the information from the approved form. Do not give out any other information.

6.2.7 If any of the required three agencies did not answer the 4-way, then contact them using the Emergency Plan Telephone Directory.

a. Be aware that offsite agencies should call back to verify the notification if a telephone other than the 4-way was used.

6.2.8 Telefax all completed forms to the Emergency Control Center.

6.3 Notification of the Emergency Response Organization through Manual Activation of the ERO Group Page

6.3.1 Manually activate the ERO group page by performing the following:

a. Obtain the Emergency or Drill Classification from the Emergency Director.

b. Obtain the following number from the Emergency Plan Telephone Directory, Immediate Notification section, Emergency Response Organization:

1. ERO Numeric group pager number

c. Contact the pager system by dialing the ERO numeric group pager number.

1. If you fail to contact the group page a second time, proceed to Step 6.4.

d. Enter the appropriate classification code:

1111 - UNUSUAL EVENT

2222 - ALERT

3333 - SITE AREA EMERGENCY

4444 - GENERAL EMERGENCY

0000 - ALL CLEAR

e. Depress the pound key (#) after entering the code.

f. Repeat Steps 6.3.1.b through 6.3.1.e to activate the group page a second time.

NOTE 6.3.1.g

Within 10 minutes the pager located in the Control Room or CAS should activate with displays of the selected classification code.

g. Wait for the pager to sound with the proper display.

1. If the Control Room and the CAS pager fail to respond, then contact the On Call Emergency Offsite Manager (see the Integrated On Call Report for numbers.)

2. Inquire if their pager has received the proper classification code.

3. If the Emergency Offsite Manager has not received the page, proceed to Step 6.4.

6.4 Individual Contact of Emergency Responders

6.4.1 If CANS and the pager system fail, then the Shift Manager or designee shall obtain the following:

a. Attachment 1, Emergency Position Checklist

b. The ERO On Call Report

c. The Emergency Plan Telephone Directory

6.4.2 Contact the positions listed on the Emergency Position Checklist using the On Call Report to determine who is on duty. The Emergency Plan Telephone Directory lists both telephone numbers and pager numbers for these individuals.

NOTE 6.4.3

It is important that calls be as short and concise as possible in order to expedite the notification process.

6.4.3 Upon making contact inform the individual of the following:

1. Your name and title.

2. Basis for your call (CANS and pagers failed to initiate emergency notifications).

3. The classification.

6.4.4 Record time of contact on Attachment 1, Emergency Position Checklist.

6.5 Notification of the NRC

6.5.1 The Shift Manager or designee shall activate the NRC Resident Inspector's pager(s) with the Emergency Classification code as follows:

a. Obtain the NRC Resident Inspector's pager number(s) from the Emergency Plan Telephone Directory, Immediate Notification section.

b. Contact the pager system by dialing the pager number(s).

c. Enter the appropriate classification code:

1111 - UNUSUAL EVENT

2222 - ALERT

3333 - SITE AREA EMERGENCY

4444 - GENERAL EMERGENCY

0000 - ALL CLEAR

d. Repeat steps 6.5.1.a through 6.5.1.c to activate the page a second time.

6.5.2 Initial notification to the NRC should be made by the Control Room staff, unless directed otherwise by the Emergency Director.

6.5.3 Make initial notification to the NRC immediately after notification of the local and state agencies, but no later than one hour after any emergency declaration.

6.5.4 For all NRC notifications, fill out the Reactor Plant Event Notification Worksheet (DB-0095), in accordance with DB-OP-00002, Operations Section Event/Incident Notifications and Actions.

6.5.5 Activate the NRC Emergency Notification System (ENS) (red phone) to contact the NRC Operations Center in Bethesda, Maryland.

a. If the ENS red phone is out of service, then use the Emergency Plan Telephone Directory, Immediate Notification section, for backup telephone numbers.

6.5.6 Transmit the information on the form.

6.5.7 Telefax all forms to the Emergency Control Center.

7.0 FINAL CONDITIONS

7.1 The required personnel have been notified in accordance with the appropriate Emergency or Drill Classification.

7.2 Any system malfunctions have been reported to the Supervisor - Emergency Preparedness.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 Davis-Besse Emergency Notification Coversheet (DBEP-012)

8.1.2 Initial Notification Form (DBEP-010)

8.1.3 Periodic Update Form (DBEP-009)

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 Emergency Position Checklist

ATTACHMENT 1: EMERGENCY POSITION CHECKLIST

For ERO Status Update use, place an "X" in the "No" space provided if the computer names the position.
For individual contact use, log the time each notification or unsuccessful attempt is made.

	Emergency Title	Emergency Facility	Person Notified? Yes	No	Time Notified*
1.	Emergency Director	ECC/TSC	____	____	_____
2.	Emergency Plant Manager	TSC	____	____	_____
3.	Emergency Offsite Manager	ECC	____	____	_____
4.	Emergency Assistant Plant Manager	CTRM	____	____	_____
5.	OSC Manager	OSC	____	____	_____
6.	Emergency Radiation Protection Manager	TSC	____	____	_____
7.	TSC Engineering Manager	TSC	____	____	_____
8.	NRC Liaison	ECC	____	____	_____
9.	JPIC Manager	JPIC	____	____	_____
10.	Core/Thermal Hydraulic Engineer	TSC	____	____	_____
11.	Emergency Planning Advisor	ECC	____	____	_____
12.	Dose Assessment Coordinator	ECC	____	____	_____

Performed by: _____ Date: _____

*Complete only if individual contact of the emergency responders is required.

Section	Reference	Comments
Note 6.2	TERMS O 13969 Q 00784	Capability to notify State and Local agencies within 15 minutes after declaring an emergency.
Section 6.2	TERMS O 13462	Initial notifications should address all items in NUREG-0654, Rev. 1, Standard E Criterion 3.
Section 6.2	TERMS O 13532 O 13566 O 15211 O 15212 Q 02859 Q 03114 Q 03115	Notification of the State of Ohio as well as the Counties.
Section 6.2	TERMS O 13532 O 13567 O 15211 O 15212	Message content
Section 6.5	TERMS O13532 O 15211 O 15212 Q 02859	NRC Notification.
Section 6.2	TERMS O 13534 O 14152 O 15211	Initial and follow up message content
Section 6.2	TERMS O 15212	Documenting receipt of notification

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02220

(Supersedes RA-EP-02220 R00)

EMERGENCY CONTROL CENTER ACTIVATION AND RESPONSE

DOCUMENTATION MANAGEMENT
CONTROL COPY
NO. _____

REVISION 01

Prepared by: _____ 11/29/00 Date

Sponsor: David H. Rockwood 12-10-00
Manager - Regulatory Affairs Date

Approved by: Steven B. Hiffitt 1/13/01
Director – Technical Services Date

Approved by: J W Byrd 1/04/01
Plant Manager Date

Effective Date: ~~1/25/01~~ FEB 5 2001 DLT 2/1/01

Procedure Classification:

__X__ Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:

STEP-BY-STEP

EMERGENCY CONTROL CENTER ACTIVATION AND RESPONSE

LIST OF EFFECTIVE PAGES

Page	Change No.
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Page	Change No.

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EMERGENCY CONTROL CENTER ACTIVATION AND RESPONSE

TABLE OF CONTENTS

1.0 PURPOSE

This procedure outlines the steps required for activation, operation, and deactivation of the Emergency Control Center (ECC) as performed by the Emergency Director Advisor, Emergency Planning Advisor, State and County Communicator and the NRC Liaison.

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

2.2.1 RA-EP-01500, Emergency Classification

2.2.2 RA-EP-02110, Emergency Notification

2.2.3 RA-EP-02010, Emergency Management

2.2.4 RA-EP-00420, Prompt Notification System Malfunction

2.2.5 Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 CENTRAL COMPUTER UNIT (CCU) – Is the personal computer that the Federal Signal Corporation's SFCDWARE Software resides on and provides for the interface to the Remote Terminal Units (RTU) at each siren. This terminal provides for activation, polling and monitoring of the siren system. The CCUs are at the following locations: Ottawa County Sheriffs' Office, Davis-Besse Emergency Control Center and at the Oak Harbor 500-Foot Tower Site.

3.2 COMPUTERIZED AUTOMATED NOTIFICATION SYSTEM (CANS) - A computer developed and used to control notification of designated personnel in the event of an emergency.

3.3 EMERGENCY CONTROL CENTER (ECC) - An area located on the first floor of the Davis-Besse Administration Building which is equipped to facilitate the control and coordination of emergency activities and assessment.

4.0 RESPONSIBILITIES

4.1 The Emergency Director Advisor is responsible for:

4.1.1 Assisting the Emergency Director in performing his emergency responsibilities.

4.1.2 Providing periodic approved information to the Company Spokes-person for release to the general public.

4.1.3 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

4.2 The Emergency Planning Advisor is responsible for:

4.2.1 Verifying proper operation of CANS and appropriate ECC staff notifications of the emergency classification.

4.2.2 Verifying proper operation of the offsite sirens.

4.2.3 Providing Initial Notifications and Periodic Updates to offsite agencies.

4.2.4 Interacting with the liaisons that arrive at the ECC from the State of Ohio, and Ottawa and Lucas Counties.

4.3 The State and County Communicator is responsible for:

4.3.1 Maintaining communication with Ottawa County, Lucas County and the State of Ohio.

4.3.2 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

4.4 The NRC Liaison is responsible for:

4.4.1 Interfacing with the NRC.

4.4.2 Interfacing with the NRC Incident Response Team when it arrives at Davis-Besse.

4.4.3 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

5.0 INITIATING CONDITIONS

This procedure shall be used when:

5.1 An emergency has been declared and classified as an Alert, a Site Area Emergency, or a General Emergency.

5.2 Determined by the Emergency Director.

6.0 PROCEDURE

6.1 Emergency Director Advisor

6.1.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

6.1.2 Assist the Emergency Director in turnover of responsibilities from the Control Room.

6.1.3 Follow events closely, be prepared to brief and assist the Emergency Director concerning procedural requirements relating to the emergency (see RA-EP-02010, Emergency Management).

6.1.4 Act as a liaison between the Emergency Director and Company Spokesperson.

6.1.5 Review checklists and notifications for completeness, as appropriate.

6.1.6 Assess the need to upgrade or downgrade the emergency in accordance with RA-EP-01500, Emergency Classification.

6.2 Emergency Planning Advisor

6.2.1 Upon arrival at the ECC, verify that CANS is operational.

a. Determine who has responded to CANS.

b. Notify the Emergency Offsite Manager of CANS status and status of the emergency response organization callout.

c. If necessary, initiate additional staff notifications.

6.2.2 Ensure status boards are updated, and assign arriving status board keepers to specific status boards.

NOTE 6.2.3

This public address system transmits to the Radiological Testing Laboratory (RTL), Technical Support Center, (TSC), Emergency Control Center (ECC), the adjacent hallways, and the lunchroom at the North end of the DBAB First Floor.

6.2.3 Energize the Emergency Response Facility (ERF) PA System by:

a. Plug the PA system jack into the ECC north wall. (Located to the left of the Dose Assessment Center sliding glass doors.)

b. Depress the amplifier power "ON" button and observe that the power on light illuminates.

c. Ensure that the tone switch is in the "DEFEAT" position (out).

d. Make sure all other controls are at their assigned position, indicated by a red dot on each control.

NOTE 6.2.3.e

Microphones are located in the ECC and the TSC.

e. Press the transmit button to make announcements.

f. If problems are experienced, contact the Emergency Facilities Services Manager for assistance.

NOTE 6.2.4

When the siren monitoring program is on the "Map Display" screen, additional information about the colored dots can be obtained by opening the "Legend" Window. Detailed information about each siren can be obtained by positioning the pointer on the siren dot and left clicking the mouse.

6.2.4 From the ECC Central Computer Unit (CCU), review the siren status by:

a. Obtaining a copy of the PNS Siren Computer Map Report Form (DBEP-051).

b. From the siren computer if not already selected, select the **Map** screen from the upper tool bar.

c. Observe the color of the "Map Display" dots and record the numbers of those sirens (dots) that are not solid green or solid blue on the PNS Siren Computer Map Report Form (DBEP-051).

d. Advise the Emergency Offsite Manager (EOM) of any abnormal indications.

e. With concurrence of the EOM, reset the "Map Display" by selecting **Reset Map** on the upper tool bar.

f. Periodically check the "Map Display" and report any changes to the EOM.

6.2.5 When the ECC is activated, assume responsibility for preparing required notifications to the State of Ohio, Ottawa County, and Lucas County.

a. Ensure all Initial Notification and Periodic Update Forms are approved by the Emergency Offsite Manager and approved and initialed by the Emergency Director prior to transmittal to offsite agencies.

b. Ensure an approved Initial Notification Form is transmitted to the offsite agencies in accordance with RA-EP-02110, Emergency Notification, within 15 minutes following:

1. Change of the emergency classification

2. Change of the protective action recommendations

c. Ensure an approved Periodic Update Form is provided to offsite agencies as conditions change or at least hourly in accordance with RA-EP-02110, Emergency Notification.

d. Notify INPO of the emergency declaration, or change in classification using the Emergency Plan Telephone Directory.

6.2.6 If the emergency classification changes, notify the ERO in accordance with RA-EP-02110, Emergency Notification.

6.2.7 Telecopy meteorological condition changes to the State of Ohio, and Ottawa and Lucas Counties.

NOTE 6.2.8

The Davis-Besse Prompt Notification System is comprised of 54 sirens. Sirens 1-5 are located in Jerusalem Township in Lucas County; the remaining 49 sirens are in Ottawa County. Ottawa County has 32 non-EPZ sirens in addition to the 49 EPZ sirens. Sirens with numbers that are greater than 90 are Ottawa County EPZ sirens. For additional information reference procedure, RA-EP-00420, Prompt Notification System Malfunction.

6.2.8 When requested by Ottawa or Lucas County and with the EOM's concurrence, use the CCU to determine the status of siren activation:

a. Obtain a copy of the PNS Siren Computer Map Report form (DB-EP-051).

b. Select **Polling** from the upper tool bar. Left clicking on **Polling** will initiate the polling sequence.

c. After the polling is complete (approximately 10 minutes), observe the color of the "Map Display" dots and record the numbers of those sirens (dots) that are not solid green on the PNS Siren Computer Map Report Form (DB-EP-051).

d. Advise the Emergency Offsite Manager (EOM) of any abnormal indications. Then communicate this information to the requesting offsite agency.

e. With concurrence of the EOM reset the "Map Display" by selecting **Reset Map** on the upper tool bar. All siren dots should change to blue.

f. Periodically check the "Map Display" and report any changes to the EOM.

6.2.9 Ensure protective actions implemented by the State of Ohio are posted on the Radiological Status Board.

6.2.10 Ensure protective actions implemented by the Counties are posted on the Protective Actions Taken Status Board.

6.2.11 Provide periodic briefings to and answer questions from the EMA Liaisons in the ECC.

6.2.12 Provide assistance to the Emergency Offsite Manager, as needed.

6.2.13 Upon deactivation of the ECC, inform the State of Ohio, Ottawa and Lucas Counties using an Initial Notification Form in accordance with RA-EP-02110, Emergency Notification.

6.2.14 Notify the ERO of the "All Clear" in accordance with RA-EP-02110, Emergency Notification.

6.3 State and County Communicator

6.3.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

6.3.2 Establish and maintain communications with Ottawa and Lucas Counties, and the State of Ohio.

6.4 NRC Liaison

6.4.1 On failure of the Computerized Automated Notification System (CANS) call out emergency staffing as specified in the call tree section of the Emergency Plan Telephone Directory.

6.4.2 When notified that an NRC Incident Response Team is being sent to Davis-Besse:

a. Determine as much information as possible about the response team:

1. Director of Site Operations
2. Number of Responders
3. Estimated Time of Arrival

b. Advise the NRC of any special route considerations and recommend that the team report to the DBAB for their initial briefing.

c. Notify the following of the pending arrival:

1. Emergency Director
2. Emergency Offsite Manager
3. Emergency Plant Manager
4. Emergency Security Manager
5. Company Spokesperson

d. Call in additional personnel as required for:

1. Escorts
2. Technical Briefers

e. Request assistance from the Emergency Facilities Services Manager to set up the NRC work areas.

7.0 FINAL CONDITIONS

This procedure shall be terminated when:

7.1 Plant conditions are such that the emergency has been downgraded to Unusual Event, or terminated; and the ECC has been deactivated.

7.2 All equipment and useable supplies have been returned to their storage location.

7.3 The ECC staff has been relieved of all duties associated with the operation of the ECC.

7.4 The Company Spokesperson has been fully briefed on plant status and planned recovery actions.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 None

COMMITMENTS

Section	Reference	Comments
None	None	None

END

PROCEDURE DEVELOPMENT FORM
ED 7635-12

SHEET 1 OF 1 | PROCEDURE ACTIVITY TRACKING NO. 97-2719

SECTION 1 - IDENTITY

PROCEDURE NO.	~~PROPOSED~~ REVISION NO.	PROPOSED CHANGE NO.			
RA-EP-02245	00	01	☐ NEW ☐ CANCELLATION	☐ RESTRICTED	
SUPERSEDES:			☐ REVISION ☐ INACTIVATION	EXPIRES _____ (DATE/EVENT)	
			☑ CHANGE ☐ REACTIVATION		
			☐ TEMPORARY APPROVAL		

PROCEDURE TITLE: PROTECTIVE ACTION GUIDELINES

PROCEDURE CLASSIFICATION: ☒ SR ☐ QR ☐ N-QR CHANGE TO? ☐ YES ☒ NO

PAT/PCR NOS. CLOSED OUT ☐ CONTINUED

ACTIVITY SUMMARY / PURPOSE

IMPLEMENT SUPP. 3 TO NUREG-0654/FEMA-REP-1

☐ CONTINUED

SECTION 2 - CONCURRENT EFFECTIVE DOCUMENTS ☐ CONTINUED

DOCUMENT NO. / REVISION	DOCUMENT TITLE	PAT NO./CHANGE REQUEST

DOCUMENTATION MANAGEMENT
CONTROL COPY
NO. 1665

SECTION 3 - REVIEW ORGANIZATIONS

	REQUIRED	REQUESTED
OPS		
RP		

☐ CONTINUED ☐ CONTINUED

PROCEDURE PREPARER	DATE	QUALIFIED REVIEWER	DATE
	1/13/98	Dennis J. Gordon	1/16/98

SECTION 4 - ATTACHMENTS

COMPLETED AND ATTACHED

YES	N/A		YES	N/A		YES	N/A	
☒	☐	VALIDATION CHECKLIST	☒	☐	SAFETY REVIEW	☐	☒	REVISED CROSS REFERENCES LIST
☒	☐	COMMITMENT VERIFICATION SUMMARY	☒	☐	DOCUMENT REVIEW SHEETS	☐	☒	PCRs
☐	☒	SAFETY EVALUATION NO. _____	☐	☒	P COMMITMENT DOCUMENTATION	☐	☐	OTHER _____

FINAL QUALIFIED REVIEWER CONCURRENCE | DATE 2/9/98

SECTION 5 - TEMPORARY APPROVAL

MANAGEMENT SRO	DATE	APPROVAL AUTHORITY	DATE

SECTION 6 - CONCURRENCE / FINAL APPROVAL

PROCEDURE SPONSOR	DATE 2/20/98	☒ SRB	DATE 2/18/98
☐ DIRECTOR - NA N/A	DATE	☒ PLANT MANAGER	DATE 2/18/98
☐ DIRECTOR - E&S N/A	DATE	APPROVAL AUTHORITY Robert E. Donnelly	DATE 2/20/98
☐ DIRECTOR - NSS N/A	DATE		

SECTION 7 - TRAINING / PROCEDURE EFFECTIVITY

TRAINING COMPLETE	ALTERATION EFFECTIVE DATE	PROCEDURE SPONSOR	DATE
☒ YES ☐ N/A	6/11/98		6/4/98

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02245

(Supersedes HS-EP-02245 R4)

Protective Action Guidelines

REVISION 00

Prepared by: _____ 1/15/97 Date

Sponsor: _____ Manager - Regulatory Affairs 1/15/97 Date

Approved by: Robert E Donnell Director - Engineering & Services 1/29/97 Date

Approved by: _____ Plant Manager 1/22/97 Date

Effective Date: APR 8 1997

LEVEL OF USE:

STEP-BY-STEP

Procedure Classification:

__X__ Safety Related

_____ Quality Related

_____ Non-Quality Related

C97-2719

LIST OF EFFECTIVE PAGES

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2	C-1
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11	C-1
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TABLE OF CONTENTS

1.0 PURPOSE

This procedure defines specific guidelines for determining protective action recommendations for emergencies involving abnormal releases of radioactivity at the Davis-Besse Nuclear Power Station (DBNPS).

2.0 REFERENCES

2.1 Developmental

2.1.1 U.S. Food and Drug Administration, Federal Register, Vol. 47, No. 205, Oct. 22, 1982.

2.1.2 IE Information Notice No. 83-28: Criteria for Protective Action Recommendations for General Emergencies, dated May 4, 1983.

2.1.3 Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA 400-R-92-001, May 1992.

2.1.4 Anno, George, Dore, and Michael: The Effectiveness of Sheltering as a Protective Action Against Nuclear Accidents Involving Gaseous Releases, EPA 520/1-78-001A, April 1978.

2.1.5 SAND 77-1725, Public Protection Strategies for Potential Nuclear Reactor Accidents - Sheltering Concepts with Existing Public and Private Structures.

2.1.6 Davis-Besse Nuclear Power Station Emergency Plan.

2.1.7 KLD Associates, Inc., "Development of Evacuation Time Estimates for Davis-Besse Nuclear Power Station", Revision 4, November 1991.

2.2 Implementation

2.2.1 RA-EP-02110, Emergency Notification

2.2.2 HS-EP-02240, Offsite Dose Assessment

2.2.3 RA-EP-02520, Assembly and Accountability

2.2.4 HS-EP-02530, Evacuation

2.2.5 HS-EP-02620, Emergency Dose Control and Potassium Iodide Distribution

3.0 DEFINITIONS

3.1 ALARA - As Low As is Reasonably Achievable.

3.2 CORE MELT SEQUENCE - A situation in which the core could be uncovered and there is no means for restoring cooling to the core. Without cooling, overheating and melting of the fuel will occur.

3.3 COMMITTED DOSE EQUIVALENT (CDE) - The dose equivalent to organs or tissues that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

3.4 DADS - The Data Acquisition and Display System is a computerized system which provides plant parameters, meteorology data, dose calculations, and other related programs.

3.5 EVACUATION DOSE - The dose that a potential evacuee would receive if he or she were openly exposed during the evacuation.

3.6 EVACUATION EXPOSURE PERIOD - The period during which those people being evacuated are exposed to the radioactive plume.

3.7 EMERGENCY PLANNING ZONE(S) (EPZ) - The two zones that are established around a nuclear power station in which predetermined protective action plans are needed.

3.7.1 The first zone has an approximate radius of 10 miles for the plume exposure pathway.

3.7.2 The second zone has an approximate radius of 50 miles for the ingestion exposure pathway.

3.8 EXPOSURE TIME - That period of time during which the offsite population will be exposed to radiation as a result of an airborne radioactive release.

3.9 LAKE BREEZE - A meteorological condition that may occur on clear, sunny days. During a lake breeze, a radioactive release can travel inland, rise, reverse course in an overhead return flow, and then return to land in a convoluted path.

3.10 OFFSITE - Any area outside the Owner Controlled Area surrounding DBNPS.

3.11 MINIMUM PROTECTIVE ACTION RECOMMENDATIONS (PAR) - The minimum PAR is evacuate Subarea 1, Subarea 12, and affected downwind subareas within 5 miles.

3.12 SECTOR - One of the 16 areas bounded by radii 22½ degrees apart into which the 10-mile EPZ is divided. Sectors are designated by the Letters A through R, excluding I and O. Sector A is north, E is east, J is south, and N is west.

3.13 TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE) - The sum of the deep-dose equivalent (for external exposure) and the Committed Effective Dose Equivalent (for internal exposure).

4.0 RESPONSIBILITIES

4.1 The Emergency Director is responsible for directing protective actions for Station personnel and recommending protective actions to offsite officials for the Plume Exposure Pathway (10-mile EPZ).

4.2 The Dose Assessment Coordinator is responsible for collecting and analyzing offsite dose assessment data used to provide the basis for protective action recommendations.

5.0 INITIATING CONDITIONS

Initiate this procedure when a declared emergency has the potential for an abnormal release of radioactivity.

6.0 PROCEDURE

6.1 Onsite Protective Actions

6.1.1 The Emergency Director shall take the necessary actions to protect DBNPS personnel.

a. Evacuate personnel in accordance with HS-EP-02530, Evacuation.

b. Account for personnel in accordance with RA-EP-02520, Assembly and Accountability.

c. Distribute potassium iodide in accordance with HS-EP-02620, Emergency Dose Control and Potassium Iodide Distribution.

6.1.2 All supervisors shall ensure that appropriate safety and ALARA precautions are implemented.

NOTE 6.2

1. Any condition that justifies issuing an offsite Protective Action requires a General Emergency declaration.

2. Offsite Protective Action Recommendations shall be made with initial notification of a General Emergency.

3. A minimum Protective Action Recommendation or greater shall be made at a General Emergency.

6.2 Offsite Protective Actions

6.2.1 IF the reactor is in a core melt sequence,
THEN GO TO Attachment 1, Flowchart for Determining Protective Action Recommendations During Core Melt Sequence.

6.2.2 IF using DADS Dose Program to calculate dose rates,
THEN GO TO, Step 6.2.3 and recommend PARs generated by that program,
OTHERWISE, determine Protective Action Recommendations by proceeding to Attachment 2, Protective Action Recommendations by Affected Subarea.

6.2.3 Notify offsite agencies and the NRC of the PARs and the affected subareas using RA-EP-02110, Emergency Notification, and Initial Notification Form. If a lake breeze is occurring, the wind direction is unknown or the wind direction is from between 162° and 277°, inform the NRC that the release may enter Canadian territory.

6.2.4 As Radiation Monitoring Team (RMT) data becomes available, compare it to dose projections and verify that protective action recommendations are adequate.

6.3 Continue to monitor radiological and meteorological conditions, and repeat Steps 6.1 and 6.2 as conditions change.

7.0 FINAL CONDITIONS

Terminate this procedure when the Emergency Director, and offsite agencies determine that dose assessment and protective actions are no longer necessary.

8.0 RECORDS

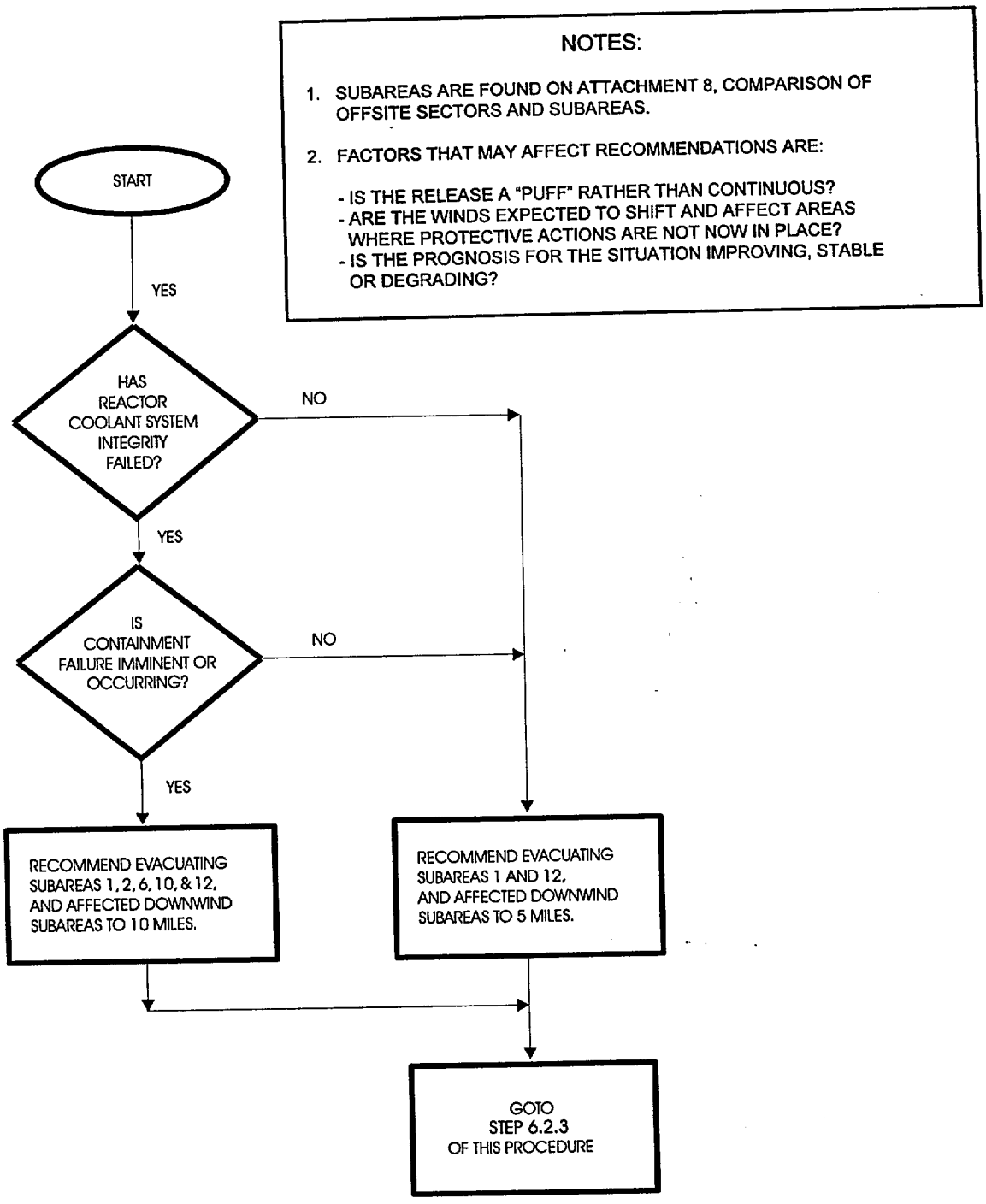
8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106.

8.1.1 None

8.2 The following nonquality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management in accordance with NG-NA-00106.

8.2.1 None

ATTACHMENT 1: FLOWCHART FOR DETERMINING PROTECTIVE ACTION RECOMMENDATIONS DURING CORE MELT SEQUENCE



ATTACHMENT 2: PROTECTIVE ACTION RECOMMENDATIONS BY AFFECTED SUBAREA

A. Using Attachment 3, Affected Subareas by Wind Direction, determine the affected subareas. Circle the affected subareas in Column A of Table 1, Protective Actions and Affected Subareas.

B. Calculate TEDE and Thyroid Dose Rates at 0.75, 2 and 5 miles using HS-EP-02240, Offsite Dose Assessment, and insert in Column B of Table 1.

C. Insert the expected release duration (in hours) in Column C of Table 1, if unknown use 2 hours.

D. Calculate the dose at 0.75, 2 and 5 miles by multiplying the values in Column B by those in Column C. Enter the values for dose in Column D.

E. Compare the dose values in Column D to the limits for TEDE and Thyroid CDE in Column E.

F. IF either TEDE or Thyroid CDE is greater than or equal to the associated limit,
THEN circle "yes" in Column F and recommend evacuate for the affected subareas determined in Step A.
OTHERWISE, circle "no" and recommend appropriate action for the affected subareas determined in Step A.

G. Make appropriate notification in accordance with Step 6.2.3.

ATTACHMENT 2: PROTECTIVE ACTION RECOMMENDATIONS BY AFFECTED SUBAREA (cont'd)

TABLE 1: PROTECTIVE ACTIONS AND AFFECTED SUBAREAS

Distance From Plant	A Affected Subareas		B Doserate (REM/hr)	C Release Duration (hr)	D Dose (REM)	E Limit (REM)	F Protective Action Recommendation
0.75 mile	(0-2 miles) 1 12	TEDE				≥ 1	Yes: Evacuate No: No Action (Evacuate if in General Emergency)
		Thyroid CDE (I_2)				≥ 5	Yes: Evacuate No: No Action (Evacuate if in General Emergency)
2 mile	(2-5 miles) 2 6 10	TEDE				≥ 1	Yes: Evacuate No: No Action (Evacuate if in General Emergency)
		Thyroid CDE (I_2)				≥ 5	Yes: Evacuate No: No Action (Evacuate if in General Emergency)
5 mile	(5-10 miles) 3 4 5 7 8 9 11	TEDE				≥ 1	Yes: Evacuate No: No Protective Action
		Thyroid CDE (I_2)				≥ 5	Yes: Evacuate No: No Protective Action

Performed by:

_____ _____

Signature Date

ATTACHMENT 3: AFFECTED SUBAREAS BY WIND DIRECTION

NOTE
This table was based on the inclusion of 22 1/2° segments on either side of the plume centerline.

1. For the 0-2 mile distance from the plant, the affected subareas are always 1 and 12.

2. IF a lake breeze is occurring or the wind direction is unknown,
THEN select "Unknown" subareas.
OTHERWISE, record the wind direction (if known) _____°, and identify affected subareas for distances of 2-5 and 5-10 miles from the plant.

Wind Direction From	Distance From Plant (miles)	Affected Subarea(s)
141° to 278°	2-5	
	5-10	(None)
279° to 286°	2-5	6
	5-10	7,9
287° to 293°	2-5	6
	5-10	7,8,9
294° to 330°	2-5	2,6
	5-10	7,8,9
331° to 005°	2- 5	2,6
	5-10	5,7,8
006° to 013°	2-5	2,6
	5-10	4,5,7,8
014° to 020°	2-5	2
	5-10	4,5
021° to 065°	2-5	2
	5-10	3,4,5
066° to 072°	2- 5	2
	5-10	3,4
073° to 078°	2- 5	2,10
	5-10	3
079° to 117°	2- 5	2,10
	5-10	3,11
118° to 122°	2-5	10
	5-10	3,11
123° to 140°	2-5	10
	5-10	11
Unknown	2-5	2,6,10,
	5-10	3,4,5,7,8,9,11

ATTACHMENT 4: PROTECTIVE ACTION DECISION WORKSHEET
FOR TEDE

THIS ATTACHMENT
DELETED

ATTACHMENT 4: PROTECTIVE ACTION DECISION WORKSHEET
FOR TEDE (Cont.)

THIS ATTACHMENT
DELETED

ATTACHMENT 4: PROTECTIVE ACTION DECISION WORKSHEET FOR TEDE (Cont.)

THIS ATTACHMENT
DELETED

ATTACHMENT 5: PROTECTIVE ACTION DECISION WORKSHEET
FOR THYROID DOSE

THIS ATTACHMENT
DELETED

ATTACHMENT 5: PROTECTIVE ACTION DECISION WORKSHEET
FOR THYROID DOSE (Cont.)

THIS ATTACHMENT
DELETED

ATTACHMENT 5: PROTECTIVE ACTION DECISION WORKSHEET
FOR THYROID DOSE (Cont.)

THIS ATTACHMENT
DELETED

ATTACHMENT 6: EVACUATION TIME ESTIMATES

1. Choose the scenario which most closely resembles actual conditions.

Time to Evacuate 100 Percent of Affected Population (Hr.)

EVACUATION DISTANCE	SUBAREAS	MAY THROUGH SEPTEMBER					
		MIDDAY (6 AM - 6 PM)					EVENING
		WEEKDAY			WEEKEND		
		GOOD WEATHER	RAIN	FLOOD	GOOD WEATHER	RAIN	GOOD WEATHER
0 - 2 MILES	1, 10, 12	3.2	3.6	3.1	3.6	4.2	2.0
0 - 5 MILES	1, 2, 10, 12	3.3	4.0	3.2	3.6	4.8	2.1
	1, 6, 10, 12	3.2	3.6	3.1	3.6	4.2	2.0
	1, 2, 6, 10, 12	3.3	4.0	3.2	3.9	4.8	2.1
0 - 10 MILES	1, 6, 7, 8, 9, 10, 12	3.8	4.8	3.6	5.4	6.8	2.5
	1, 2, 5, 6, 7, 8, 9, 10, 12	4.9	6.1	5.0	5.7	6.8	4.1
	1, 2, 3, 4, 5, 10, 11, 12	4.3	5.3	4.0	3.8	5.9	3.3
	1, 2, 3, 10, 11, 12	3.6	4.3	3.7	4.2	5.1	2.5
	1, 10, 11, 12	3.3	3.7	3.2	3.7	4.3	2.1
	1 - 12	4.9	6.1	5.0	5.7	6.8	4.1

EVACUATION DISTANCE	SUBAREAS	OCTOBER THROUGH APRIL				
		MIDDAY (6 AM - 6 PM)				EVENING
		WEEKDAY				
		GOOD WEATHER	RAIN	SNOW	FLOOD	GOOD WEATHER
0 - 2 MILES	1, 10, 12	3.0	3.0	4.6	3.1	2.1
0 - 5 MILES	1, 2, 10, 12	3.1	3.1	4.6	3.2	2.2
	1, 6, 10, 12	3.1	3.1	4.5	3.1	2.1
	1, 2, 6, 10, 12	3.1	3.1	4.6	3.2	2.2
0 - 10 MILES	1, 6, 7, 8, 9, 10, 12	3.1	3.2	4.6	3.5	2.3
	1, 2, 5, 6, 7, 8, 9, 10, 12	3.2	3.2	4.7	3.6	2.7
	1, 2, 3, 4, 5, 10, 11, 12	3.2	3.3	4.7	3.6	2.6
	1, 2, 3, 10, 11, 12	3.2	3.2	4.7	3.3	2.2
	1, 10, 11, 12	3.0	3.0	4.5	3.1	2.1
	1 - 12	3.2	3.3	4.7	3.6	2.7

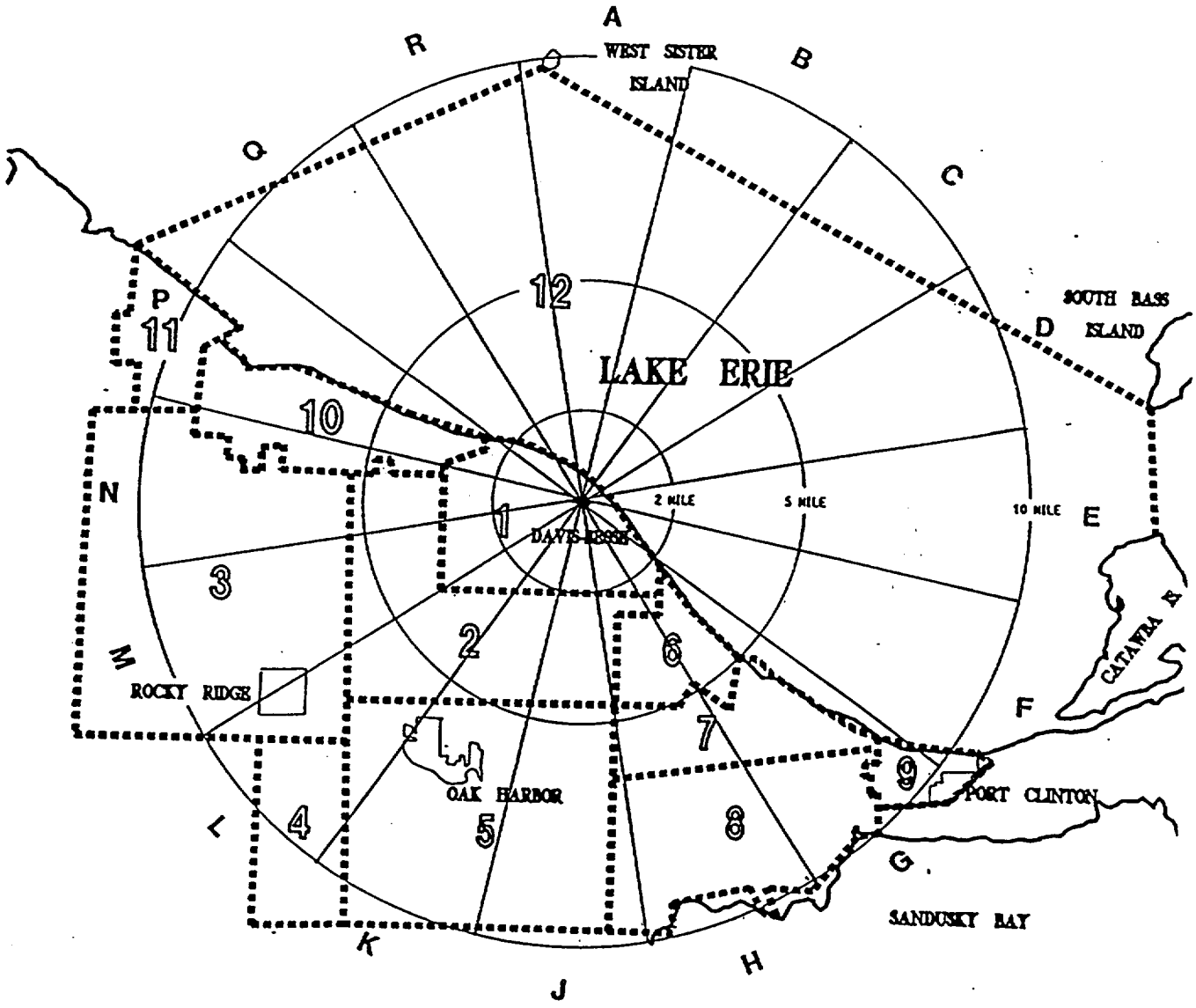
ATTACHMENT 7: REPRESENTATIVE SHIELDING FACTORS

THIS ATTACHMENT
DELETED

ATTACHMENT 7: REPRESENTATIVE SHIELDING FACTORS (Cont.)

THIS ATTACHMENT
DELETED

ATTACHMENT 8: COMPARISON OF OFFSITE SECTORS AND SUBAREAS



COMMITMENTS

Section	Reference	Comments
Attachment 8	TERMS O 13602	Depiction of both 22.5° sectors and evacuation subareas
Attachments 1,2	TERMS O 13523	Combination of subareas 1 and 12 for protective action recommendations
Attachments 2	TERMS O 13592	Release duration considered in projected dose calculations
Attachment 1,2,3	TERMS O 13645	Automatic recommendation to evacuate "keyhole"
Attachments 1,2,3,8	TERMS O 13920	Combine Subareas 1, 8 and 11 of Evacuation Sector Map
Attachment 3	TERMS O 13684	Large scale EPZ map same as this attachment
Attachment 2	TERMS O 14992	Protective Action decisions during Lake Breeze
Attachment 2	TERMS O 13584	Provide sufficient guidance to make appropriate Protective Action Recommendations
Entire Procedure	TERMS Q 00780	Procedure for determining protective measures during an emergency

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02250

(Supersedes HS-EP-02250, R5/C2)

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RADIATION MONITORING TEAM SURVEYS

REVISION 0

Prepared by: _____ 03/16/01 Date

Sponsor: Dale E. Nuller for D. H. Lockwood 3/16/01
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Approved by: _____ 3/29/01
Director – Support Services Date

Approved by: _____ 3/29/01
Plant Manager Date

Effective Date: 4/6/01

Procedure Classification:

X Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:

STEP-BY-STEP

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1.0 PURPOSE

This procedure provides instructions for Radiation Monitoring Teams (RMTs) to perform radiological surveys and sampling outside of the Protected Area during emergencies.

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.1.2 DB-HP-01103, Use of Portable Radiation, Contamination, and Airborne Survey Equipment

2.2 Implementing

2.2.1 RA-EP-00600, Emergency Facilities and Equipment Maintenance Program

2.2.2 HS-EP-02550, Offsite Personnel and Vehicle Monitoring and Decontamination

3.0 DEFINITIONS

3.1 DBAB RADIATION MONITORING TEAM (RMT) - Individuals who perform radiological monitoring inside the Davis-Besse Administration Building (DBAB) during emergencies.

3.2 FIELD RMT - Individuals who perform radiological monitoring outside the Protected Area and DBAB during emergencies.

4.0 RESPONSIBILITIES

4.1 DBAB RMTs shall be responsible for performing DBAB surveys and air samples, setting up personnel monitoring instrumentation in the DBAB, and assisting with decontamination at the DBAB and offsite assembly area; including the setting up and operation of laboratory equipment for analysis of DBAB Habitability Surveys and RMT Field Samples.

4.2 Field RMTs shall be responsible for distributing dosimetry to the Warehouse and the Access Road Security Station, performing surveys, air sampling, and environmental sampling outside of the Protected Area, as directed by the RMT Coordinator.

4.3 The Supervisor - Emergency Preparedness shall be responsible for accumulating and submitting records to Nuclear Records Management.

5.0 INITIATING CONDITIONS

This procedure shall be implemented:

5.1 When an emergency has been declared and classified as an Alert, a Site Area Emergency, or a General Emergency.

5.2 At the direction of the Emergency Director.

6.0 PROCEDURE

6.1 Radiation Monitoring Team (RMT) Initial Instructions

6.1.1 RMT members should sign in on the status board, enter their estimated annual exposure to date, and obtain personnel dosimetry from Cabinet #1 in the Radiological Testing Lab (RTL).

a. Each RMT member should possess and complete:

1. One Thermoluminescent Dosimeter (TLD).

2. One Self-Reading Dosimeter (SRD), this will normally be a 0-500 mRem SRD.

3. Completed TLD and SRD issuance documentation

b. Rezero the SRD if scale is greater than 20%.

c. Record initial SRD readings on the Dosimeter Record, ED 6547, and when assigned to a team, update the status board with your name and SRD reading.

d. Wear the TLD and SRD together on outer clothing between your collar and waist.

6.1.2 While in the DBAB, RMT members shall perform as directed by the RTL Coordinator.

a. IF assigned to a Field RMT,
THEN go to Subsection 6.2, Field RMT Activation.

b. IF assigned to a DBAB RMT,
THEN go to Subsection 6.5, DBAB RMT Activation.

6.1.3 IF the RTL Coordinator is not present,
THEN a senior RMT member should assume this duty,
AND prepare for field surveys in accordance with Subsection 6.2, Field RMT Activation.

6.2 Field RMT Activation

Field RMT Member should:

6.2.1 Inform the RTL Coordinator of any problems encountered during Field RMT Activation.

6.2.2 Fill out a Potassium Iodide (KI) Administration Form (ED 8057). The RTL Coordinator will provide the KI briefing.

6.2.3 Locate a RMT Kit and an Environmental Sampling Kit.

6.2.4 IF the seal is NOT intact on either kit,
THEN inventory the contents of the unsealed kit using RA-EP-00600, Emergency Facilities and Equipment Maintenance Program.

6.2.5 Obtain a 0-5 Rem SRD from the RMT kit.

a. Rezero SRD
b. Wear SRD next to TLD and other SRD.

6.2.6 Conduct an operational check of the survey meters in the RMT kits, and the RADeCO H-809B and H-809C air samplers in accordance with Attachment 1, Instrument Check.

a. During operational checks report any problems to the RTL Coordinator.

6.2.7 If assigned by the RTL Coordinator, obtain 10 dosimetry packets and identification tags from the DBAB RTL for distribution to the Access Road Security Station and Warehouse.

a. Rezero all SRDs
b. Take dosimeter record forms for issue documentation when delivered
c. Instruct person receiving package, issuance documentation shall be completed and TLDs cannot be assigned to more than one individual.

6.2.8 Obtain an SMR handheld radio from Cabinet #1.

6.2.9 When all equipment is checked and operating, report to the RTL Coordinator that the team is ready for field monitoring.

6.2.10 When directed by the RTL Coordinator, proceed to the Dose Assessment Center for a briefing from the RMT Coordinator.

6.3 Field RMT Operations

RMT members should perform as directed by the RMT Coordinator during field RMT Operations.

NOTE 6.3.1

Normal background dose rate is less than 0.2 mRem/hr.

6.3.1 Monitor dose rates while proceeding to the RMT vehicle with RMT Kit, air samplers, tripod, Environmental Sampling Kit and at least one hand-held radio.

6.3.2 Check the vehicle-mounted air sampler response.

a. Mount the air sampler on the vehicle.

b. Plug the power cable into the receptacle on the mount.

c. Ensure vehicle is running.

d. Remove the cover and/or tape from the filter holder.

e. Turn on the air sampler.

f. Ensure the flow meter indicates the calibrated flow rate.

g. Turn off the air sampler.

h. Replace the cover and/or tape.

6.3.3 While in the RMT vehicle, set the RO-2A or RSO-50 to the 0-50 Rem/hr range and keep it within reach in case area radiation levels exceed 5 Rem/hr.

a. Remove the PRM-6 or equivalent count rate meter and have it on and accessible for early plume detection.

6.3.4 Keep the vehicle running with a SMR radio on at all times.

6.3.5 Conduct a radio check before leaving the site, away from the DBAB.

a. IF all radios become inoperable in the field,
THEN contact the RMT Coordinator via telephone using the numbers in the RMT Vehicle Guidebook, located in the vehicle glovebox.

6.3.6 As directed by the RTL Coordinator, distribute personnel dosimetry to the Access Road Security Station and Warehouse.

a. Proceed to the Access Road Security Station.

1. Distribute personnel dosimetry to guards.

2. Fill out the Dosimeter Record, ED 6547, for personnel dosimetry issued.

3. Ensure personnel understand their responsibility for dosimetry issued to them.

b. Proceed to the Warehouse.

1. Distribute personnel dosimetry to Warehouse personnel.

2. Fill out the Dosimeter Record, ED 6547, for personnel dosimetry issued.

3. Ensure personnel understand their responsibility for dosimetry issued to them.

c. Keep dosimetry records in your possession until returning to the RTL.

d. Instruct personnel how to process dosimetry at the end of the shift.

e. Ensure dosimetry is available to oncoming shift.

6.3.7 Proceed in RMT vehicle to assigned survey location when instructed by RMT Coordinator.

6.3.8 IF dose rates exceed 5 Rem/hr,
THEN the RMTs shall exit to a low dose rate area and contact the RMT Coordinator.

NOTE 6.3.9

When the open window reading differs from the closed window reading, the plume has been entered. Open window value will be a larger number in the plume.

6.3.9 Observe survey meters for an upscale reading indicating that a radioactive plume has been encountered.

a. Obtain readings with survey meter beta shield in both open and closed positions to determine if plume has been entered.

6.3.10 Traverse the plume, and complete the plume data section of DBEP-005, Field RMT Survey Record.

a. Check personal dosimetry after each traverse.
b. Record value in "RMT Dose" section of DBEP-05.

6.3.11 IF plume dose rates exceed 500 mrem/hr (closed window), or SRD reaches 400 mrem or greater,
THEN convey applicable data to the RTL Coordinator.

a. IF instructed to rezero a SRD,
THEN record the final reading, date and time
AND new initial reading on Dosimeter Record, ED 6547, with date and time.

b. Use the 0-5 Rem SRD as a backup if the other SRD over ranges or is dropped and is off scale.

6.3.12 IF plume dose rates do not exceed 500 mRem/hr (closed window),
AND open-window readings are greater than closed-window readings,
THEN proceed to the plume centerline and obtain an air sample in accordance with Attachment 2, Field Air Sampling Procedure.

6.3.13 Report air sample results to the RMT Coordinator after leaving the plume.

a. Continue to observe the survey meter while analyzing air sample.

6.3.14 As directed, perform environmental sampling using the following attachments:

° Vegetation Sampling Procedure, Attachment 3
° Soil Sampling Procedure, Attachment 4
° Water Sampling Procedure, Attachment 5
° Snow Sampling Procedure, Attachment 6

6.3.15 Report to the RMT Coordinator that environmental sampling is complete

a. Continue to observe the survey meter.

6.4 Field RMT Deactivation

6.4.1 Collect Access Road Security Station and Warehouse dosimetry and complete dosimetry record forms.

6.4.2 IF directed to return to the RTL,
THEN return RMT vehicle to its parking spot near the DBAB.

6.4.3 Return to the RTL .

a. Notify the RTL Coordinator of your arrival.

b. Perform personnel monitoring prior to entering the facility.

c. The RTL Coordinator will assist with personnel and equipment monitoring and decontamination.

6.4.4 Deliver all environmental samples to the RTL Coordinator.

6.4.5 IF background radiation levels allow,
THEN survey RMT vehicles for contamination.

a. Survey wheel wells, exterior of air filter, front grill/ radiator, and door handles.

b. Document on Survey Record

c. Report survey results to the RTL Coordinator.

6.4.6 Conduct a debriefing with the RMT Coordinator and return vehicle keys.

6.4.7 Debrief with the RTL Coordinator.

° Complete and submit all recorded surveys.

° Complete and submit dosimeter record forms.

° Return personnel monitoring devices.

° Report procedural or equipment problems.

6.4.8 Inventory and restock RMT Kit and Environmental Sampling Kit according to RA-EP-00600.

6.4.9 IF radioiodine cartridge reading was greater than 100 net CPM,
THEN complete Attachment 14, Estimate of CEDE From Radioiodides,
AND inform the RTL Coordinator.

6.5 DBAB RMT Activation

6.5.1 Conduct operational checks of the survey meters to be used in accordance with Attachment 1, Instrument Check.

a. Use survey instruments from Cabinet #1 in the RTL, when available; otherwise use RMT kit instruments.

- RSO - 5 or equivalent
- PRM - 6 or equivalent

b. During operational checks, report any problems to the RTL Coordinator.

6.5.2 Obtain an AC powered air sampler from Cabinet #1, and perform an operational check in accordance with Attachment 1, Instrument Check.

6.5.3 IF directed by the RTL Coordinator,
THEN Assemble 10 dosimetry packets from Cabinet #1.

a. Rezero SRDs.

6.5.4 Report to the RTL Coordinator that the team is ready to perform DBAB surveys.

6.6 DBAB RMT Operations

DBAB RMT members should perform the following when directed by the RTL Coordinator:

6.6.1 Check area monitoring dosimetry in the DBAB.

a. Take a dosimeter charger from Cabinet #1 to rezero SRDs if required.

b. Obtain a DBAB Master key and an Annex Master key from the Dose Assessment Area key locker.

c. Check Area Monitoring dosimetry at locations designated on Area Monitoring Stations, Attachment 8.

1. Record TLD numbers .

2. Record SRD numbers, readings, and time of readings.

d. Return to the RTL and report to the RTL Coordinator.

6.6.2 Set up personnel monitoring instrumentation.

a. Ensure operational check(s) of frisker(s) have been performed in accordance with Attachment 1, Instrument Check.

NOTE 6.6.2.b

Normal installations are at South Security Station and Plant Entrance Area (Reference Attachment 9, DBAB Map.)

b. Place friskers at locations designated by the RTL Coordinator.

c. Report set-up completion to RTL Coordinator.

6.6.3 Continuous Air Monitor (CAM)

a. Perform an operability check on the CAM in accordance with Attachment 10, Continuous Air Monitor Operability Check.

6.6.4 Operation of RTL Counting Equipment

Establish operation of laboratory counting equipment using Attachment 7, Counting Equipment Set-up and Operation.

6.6.5 Indoor air samples:

a. Ensure air sampler operability has been checked in accordance with Attachment 1, Instrument Check.

b. Proceed to sampling location assigned by RTL Coordinator.

NOTE 6.6.5.c

Air samples performed at ground level may be invalidated by loose surface contamination.

c. Place air sampler at waist level, or above.

d. Ensure that the filter (rough side out) and cartridge (follow flow arrow) are installed correctly.

e. Plug sampler power cord into an electrical outlet.

6.6.5 Indoor air samples (cont.)

f. Remove tape from the filter assembly.

g. Start air sampler and record start time on the air sample bag label.

h. Record the following on an air sample bag label:

- Sample date
- Sample location
- LI number (air sampler number)
- Calibration due date
- Time on
- Flow rate
- Tester

i. Collect a 10-minute air sample, unless otherwise directed by the RTL Coordinator.

j. Record stop time on air sample bag label.

k. Return to the RTL.

l. Transfer the silver zeolite cartridge and particulate filter to the labeled air sample bag.

m. Give the labeled air samples to the RTL Coordinator,
AND frisk, decontaminate as necessary,
THEN return the air sampler to Cabinet #1.

n. Count silver zeolite cartridge/filter paper combination using Bicron LabTech in accordance with Attachment 7.

1. Record results on Attachment 11, Air Sample Analysis Worksheet.

o. Transfer the air filter only to a labeled sample bag.

p. Use a frisker to determine gross beta on the particulate filter using Attachment 11, Air Sample Analysis Worksheet.

6.6.6 DBAB area radiation and contamination surveys:

a. Obtain the following:

1. RSO-5 or the equivalent, that has been checked for operability.
2. PRM-6 or the equivalent, that has been checked for operability.
3. Three smears, numbered 9, 10 and 12, for tiled floor surfaces.

b. Conduct area surveys with the meter held at waist level.

c. Record area survey readings on Attachment 12, DBAB Survey Sheet.

d. Conduct area contamination surveys at the pre-assigned locations of Attachment 12, DBAB Survey Sheet.

1. Match smear number with location number.
2. On tile surfaces take an approximately , 8" long smear.
3. On carpet, use the PRM-6 or equivalent to survey approximately one square foot of carpet, holding the probe approximately one-half inch above the surface.

e. Record contamination surveys on Attachment 12, DBAB Survey Sheet.

f. Count smears on a scaler or frisker in the RTL, in accordance with Attachment 7.

1. Use the sample holder for consistent geometry
2. Record results

g. Submit survey sheet and smears to the RTL Coordinator.

6.6.7 RTL area radiation and contamination surveys

a. Obtain the following:

1. RSO-5 or equivalent, that has been checked for operability.
2. 10 smears numbered R1 - R10.

b. Conduct area surveys with the meter held at waist level.

c. Record area survey readings on Attachment 13, RTL Survey Sheet.

d. Conduct area contamination surveys at the pre-assigned locations on Attachment 13, RTL Survey Sheet.

e. Count smears on a scaler frisker in the RTL.

1. Use sample holder for consistent geometry
2. Record results on the survey sheet

f. Submit survey sheet to the RTL Coordinator.

NOTE 6.6.8

All herculite sections are numbered in accordance with Attachment 15. Stanchions are marked A, B, C, etc., reflecting the corresponding locations on the herculite.

6.6.8 DBAB Monitoring and Decontamination Station

a. Set up the DBAB Monitoring and Decontamination Station using Attachment 15, DBAB Monitoring and Decontamination Station.

1. Notify the OCA Supervisor that the berthing area hallway access door will be opened.

2. Installation should include:

a. Rad-rope and signs.

b. Installation of step-off-pads between the frisking stations and clean hallway leading to the TSC.

c. Rad-postings in the radiologically controlled hallway leading to the decontamination room.

6.6.8 DBAB Monitoring and Decontamination Station (cont.)

d. Containers for contaminated materials.

e. Radwaste containers.

f. A step-off-pad at the clean exit.

g. A frisking station.

h. Sufficient decontamination supplies in accordance with HS-EP-02550, Offsite Personnel and Vehicle Monitoring and Decontamination.

6.6.9 Offsite Assembly Area Decontamination:

If required, assist with decontamination at the offsite assembly area.

a. Proceed to the Dose Assessment Center for a briefing from the RMT Coordinator.

b. Obtain keys for a vehicle from the RMT Coordinator, or arrange for transportation to the offsite assembly area.

c. Obtain at least 2 friskers that have been checked for operability.

d. Obtain a RSO-5 survey meter or the equivalent, that has been checked for operability.

e. Obtain at least 2 copies of HS-EP-02550.

NOTE 6.6.9.f

Additional Radiation Protection supplies may be required that are not available in the kit, refer to the checklist on the kit and the RTL Coordinator

f. Obtain the offsite assembly area decontamination kit from the RTL.

g. Proceed to the offsite assembly area,

1. Report arrival to the RMT Coordinator.

2. Perform as instructed by the Radiation Protection Technicians.

6.7 DBAB RMT Deactivation

DBAB RMT members should:

6.7.1 Return all usable supplies and instrumentation to the proper RTL cabinet according to RA-EP-00600, Emergency Facilities and Equipment Maintenance Program.

a. Document inventory deficiencies and submit to the RTL Coordinator.

6.7.2 Ensure all smears and samples have been submitted to the RTL Coordinator.

6.7.3 Deenergize the CAM in accordance with Attachment 10; Step 9.

6.7.4 When dismissed, debrief with the RTL Coordinator.

a. Complete and submit all recorded surveys.

b. Return personnel monitoring devices.

c. Report any procedural or equipment problems.

7.0 FINAL CONDITIONS

Activities governed by this procedure may be terminated when:

7.1 RMT members have been relieved of all emergency duties.

7.2 All records have been completed and submitted to the RTL Coordinator for review.

7.3 All equipment and supplies have been returned to their storage locations.

7.4 The RTL Coordinator has forwarded all records to the Supervisor - Emergency Preparedness.

7.5 The RTL Coordinator has forwarded a copy of all personnel dosimetry records to the Manager - Radiation Protection.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 Dosimeter Record

8.2.2 RMT Field Survey

8.2.3 DBAB Area Monitoring Stations

8.2.4 DBAB Survey Sheet

8.2.5 RTL Survey Sheet

8.2.6 Air Sample Analysis Worksheet

8.2.7 Estimate of CEDE From Radioiodines

ATTACHMENT 1. INSTRUMENT CHECK

Survey Meter Source Check

Instrument					
PRM-6	Frisker	RO-2A	RSO-5	RSO-50	
X	X	X	X	X	1. Verify that the calibration date is current.
X	X	X	X	X	2. Inspect the instrument for damage.
X	X				3. Inspect and attach the GM pancake detector probe and cord, if disconnected.
X	X	X	X	X	4. Perform battery check(s).
X					5. Turn on speaker switch.
	X				6. Set alarm knob to "5" and place toggle switch to "Slow Response".
X					7. Set response knob to midpoint.
		X	X	X	8. Perform Zero check, adjust if needed.
X	X				9. Check all scales with the check source (available in lead pig in Cabinet #1. Cabinet #1 inside door lists which source to use).
					NOTE: Source must be oriented correctly
		X	X	X	10. Open beta window and check lowest scale with the check source. (Close window when complete.)
X	X	X	X	X	11. Attach a daily instrument response check sticker, if necessary, and sign on the appropriate day.
X			X		12. Set meter to lowest scale and maintain it in your possession.

ATTACHMENT 1: INSTRUMENT CHECK (CONT.)

Air Sampler Operational Check

Instrument			
H-809B	RAS-1*	H-809C	
X	X	X	1. Verify that the sampler calibration date is current.
X	X	X	2. Inspect the sampler for damage.
			3. Ensure filter assembly o-rings are in place.
X	X	X	4. Ensure filter assembly contains a particulate filter and a silver zeolite cartridge.
X	X	X	5. Reassemble the filter assembly, ensuring arrow on cartridge points toward the sampler.
X	X	X	6. Ensure rough side of particulate filter points away from the sampler (lined side toward sampler).
		X	7. Follow instructions on power supply.
X			8. Turn on a timer switch and press the "start" button.
	X		9. Plug in AC cord to 120 V. wall outlet, and turn sampler on.
X	X		10. Ensure flow meter indicates the calibrated flow rate.
X	X		11. Place palm of hand over air intake and ensure flow meter decreases.
X	X		12. Turn sampler off.
X	X		13. Tape the intake end of the filter assembly.

* or equivalent AC-powered air samplers.

ATTACHMENT 2: FIELD AIR SAMPLING PROCEDURE

NOTE 1.

a. Use teamwork to avoid cross contamination of samples.
b. If sampling while in plume, monitor for changes in dose rate.
c. Air sample duration is 10 minutes, unless otherwise specified.

1. IF dose rate is less than 500 mRem/hr,
   THEN use the vehicle mounted air sampler,
   OTHERWISE use the battery-powered air sampler on the tripod at waist level.

2. Ensure that the filter assembly has not been loosened.

3. Point the sampler into the wind, but DO NOT face the sampler toward the vehicle.

4. IF using the vehicle-mounted sampler,
   THEN ensure the cord is plugged into the battery outlet and the vehicle is running.

5. IF your watch does not have a second hand,
   THEN obtain stopwatch from RMT kit.

6. Remove tape from filter assembly.

7. Start air sampler and note start time and flow rate. Return to vehicle.

8. IF using a tripod air sampler,
   THEN exit the plume.

9. Take a plastic air sample bag from the environmental sampling kit.

10. Record the following information on the air sample bag label:

    - Sample date
    - Sample location
    - Time on
    - Flow rate
    - Tester

11. Stop sampler at the end of the sampling period and record the stop time on the air sampling bag label.

ATTACHMENT 2: FIELD AIR SAMPLING PROCEDURE (Cont.)

12. Retape the intake end of the filter assembly.

13. IF using air sampler on tripod,
THEN place yellow waste bag over air sampler and tripod,
AND place them in the vehicle.

14. IF using vehicle-mounted sampler,
THEN put plastic cover over sampler and secure tightly.

15. Drive to a low background area. Normally, a low background area is 300 counts per minute or less.

> NOTE 16
> The following steps require contamination control measures.
> The measures will vary with the current radiological conditions.

16. IF using tripod air sampler,
THEN remove air sampler from vehicle.

17. IF using vehicle-mounted sampler,
THEN remove plastic cover.

18. Record LI Number (air sampler number) and calibration due date on the air sample bag label.

19. Using the "clean" person/"dirty" person technique, remove the filter media assembly from the sampler.

> NOTE 20
> Ensure the silver zeolite cartridge and particulate filter are placed in the sample bag in the same configuration as they were installed in the air sample head.

20. Remove the silver zeolite cartridge and place into the labeled air sample bag.

21. Remove the particulate filter from the filter assembly (tweezers may be required) and place into the bag with the silver zeolite cartridge; seal the bag.

22. Clean tweezers, if used, with decon cloth.

23. Reload air sampler with clean filter cartridge and particulate filter.

ATTACHMENT 2: FIELD AIR SAMPLING PROCEDURE (Cont.)

24. Tape intake end of air sampler filter assembly.

25. Ensure tweezers have no smearable contamination and return them to the kit.

26. Put used decon cloths into a yellow waste bag.

27. Obtain PRM-6 survey meter or the equivalent, from the vehicle.

28. Move well away from the vehicle to prevent possible background interference.

29. Ensure meter is on, and set to the lowest scale.

30. Holding Geiger-Mueller (GM) pancake detector at arm's length from your body, take a background reading.

> NOTE 31
> The GM pancake detector window must face the collection side of the particulate filter/silver zeolite cartridge. (Arrow pointing away from detector.)

31. Take a contact reading on silver zeolite cartridge and particulate filter through the plastic bag.

32. Subtract background reading from contact reading and record as net reading on the air sample bag.

33. Place samples in a bag marked as radioactive material.

34. Return air sampling equipment to the vehicle avoiding cross-contamination.

35. Record pertinent data on Field RMT Survey Record (DBEP-005).

36. Report the following to the RMT Coordinator:

    - Sample start time
    - Sample length
    - Air sampler flow rate
    - Net cpm from silver zeolite cartridge/particulate filter.
    - SRD readings

37. Return to Step 6.3.13 of the procedure

ATTACHMENT 3: VEGETATION SAMPLING PROCEDURE

CAUTION 1.

Cross contamination of samples shall be avoided.

1. Don cotton liners and rubber gloves.
2. Examine large sample bag for cleanliness.
3. Obtain the 18" ruler from the environmental sampling kit.
4. IF grass is not available at the sample location,
   THEN obtain a sample of other vegetation as determined by the RMT Coordinator.
5. Define an approximate 18" square grass sample area in an undisturbed location at least 10 feet from roadway traffic.
6. Perform a radiation survey approximately 1" above grass using either a frisker or survey meter. Be cautious not to contaminate probe.
7. Record the reading on the sample bag..
8. Complete the sample bag label (Date/Time/Location/Sampler).
9. Obtain the clippers from the environmental sampling kit.
10. Use the clippers to collect the grass or vegetation within the sampling square by trimming the vegetation to the soil surface.
11. Deposit the sample into the vegetation sample bag.
12. Wipe the clippers with decon cloth and monitor both for contamination. Repeat with clean section of decon cloth, if necessary.
13. Ensure clippers have no smearable contamination and return the clippers to the environmental sampling kit.
14. Put decon cloth, gloves, and glove liners into yellow waste bag.
15. Place the sample bag into another yellow bag.
16. Take contact dose rate on yellow bags AND record on bags.
17. Return to Step 6.3.15 of the procedure.

ATTACHMENT 4: SOIL SAMPLING PROCEDURE

CAUTION 1.
Cross contamination of samples shall be avoided.

1. Don cotton liners and rubber gloves.
2. Examine large sample bag for cleanliness.
3. Obtain the 18" ruler from the environmental sampling kit.
4. Define an approximate 18" square sample area in an undisturbed location at least 10 feet from roadway traffic.
5. Perform a radiation survey approximately 1" above ground using either a frisker or survey meter.
6. Record the reading on the sample bag.
7. Complete the sample bag label.
8. Obtain the trowel from the environmental sampling kit.
9. Collect the soil sample, including roots (if vegetated), to a depth of 1". If precipitation has collected in sample area, contact RMT Coordinator for guidance.
10. Transfer the sample to the soil sample bag.
11. Wipe the trowel with decon cloth and monitor for contamination. Repeat with clean section of decon cloth, if necessary.
12. Ensure the trowel has no smearable contamination and return the trowel to the kit.
13. Put decon cloth, gloves, and glove liners into yellow waste bag.
14. Place the sample bag into another yellow bag.
15. Take contact dose rates on bags and mark the dose rate on the outside of the bags.
16. Return to Step 6.3.15 of the procedure.

ATTACHMENT 5: WATER SAMPLING PROCEDURE

CAUTION 1.
Cross contamination of samples shall be avoided.

1. Don cotton liners and rubber gloves.
2. Obtain cubitainer from environmental sampling kit and examine it for cleanliness.
3. Obtain dipper from kit and examine it for cleanliness.
4. Take sample by submerging dipper within a few inches of the water's surface. Discard the first dipper of sample.
5. Transfer sample to cubitainer and repeat until cubitainer is full.
6. Cap cubitainer.
7. Use paper towel to wipe off excess water from the cubitainer and dipper.
8. Wipe dipper with clean decon cloth and monitor for contamination. Repeat with clean, dry section of decon cloth if necessary.
9. Ensure the dipper has no smearable contamination and put dipper back in the kit.
10. Perform a radiation survey approximately 1" above ground using either a frisker or survey meter.
11. Record the reading on the sample bag.
12. Record survey results, and complete cubitainer label.
13. Bag the cubitainer in a yellow bag.
14. Discard gloves, glove liners, and used paper towels/decon clothes into a yellow waste bag.
15. Return to Step 6.3.15 of the procedure.

ATTACHMENT 6: SNOW SAMPLING PROCEDURE

CAUTION 1.

Cross contamination of samples shall be avoided.

1. Don cotton liners and rubber gloves.
2. Obtain snow container from environmental sampling kit and examine it for cleanliness.
3. Obtain the 18" ruler from the environmental sampling kit.
4. Define an approximate 18" sample square in an undisturbed location at least 10 feet from roadway traffic.
5. Perform a radiation survey approximately 1" above ground using either a frisker or survey meter.
6. Record the reading on the sample bag.
7. Record survey reading on snow container label.
8. Use the trowel to collect 1 to 2 inches of snow from the surface, unless directed to take more or less.
9. Transfer snow to container.
10. Seal container.
11. Use paper towel to wipe off excess snow and/or water from container.
12. Complete sample container label.
13. Place the snow container in a yellow bag.
14. Clean trowel with decon cloth and monitor for contamination. Repeat with clean, dry decon cloth if necessary.
15. Ensure the trowel has no smearable contamination and return the trowel to the kit.
16. Place used paper towels/decon clothes, gloves, and glove liners in the yellow waste bag.
17. Return to Step 6.3.15 of the procedure.

ATTACHMENT 7: COUNTING EQUIPMENT SET-UP AND OPERATION

1.0 Daily Checks and Setup: Bicron Labtech

1.1 Check instrument for physical damage.

1.2 Connect detector (a NaI crystal) to detector connection.

1.3 Turn instrument "ON".

1.4 Plug in Labtech to 115 volt AC 60 Hz line source
OR verify battery reads in "BAT OK" region of meter.

1.5 If the battery does not read in the "BAT OK" region, the instrument shall be used with AC power.

NOTE 1.6

Calibration values recorded on top of instrument.

1.6 Verify controls are set as follows (adjust as necessary):

a. H.V. ADJUST to value determined at calibration

b. Adjust THRESHOLD to value identified at calibration

c. WINDOW to value determined at calibration

d. Switch ANALYZER to Ch 1

1.7 Background determination

a. Set Ratemeter to X1

b. Set Scaler to Preset Time

c. Set Preset Time to 10 minutes by pressing the white set button until 10.0 is displayed

d. Press the red count button to start a count

e. Perform a 10-minute background count

f. Record background on Daily Source Check Sheet

ATTACHMENT 7: COUNTING EQUIPMENT SET-UP AND OPERATION (Cont.)

NOTE 1.8

Acceptable source response check is within ±20% of the posted source value.

1.8 Source Response Check

a. Set Ratemeter to X100 or appropriate scale for the Ba-133 source being used

b. Set Scaler to Preset time.

c. Set Preset Time to 10 minutes by pressing the white set button until 10.0 is displayed.

d. Press the red count button to start a count.

e. Insert a Ba-133 source into a calibrated geometry.

f. Perform a 10 minute source count using a Ba-133 source.

g. Subtract current daily background (BKG) cpm from source cpm.

h. Compare source net counts to the posted value for emergency use instruments.

i. Initial the daily check sticker indicating satisfactory response.

ATTACHMENT 7: COUNTING EQUIPMENT SET-UP AND OPERATION (Cont.)

2.0 Operation

2.1 Scaler Operation

a. The scaler normal use mode is the Preset time mode. This is selected by the rotary scaler switch.

b. Ensure instrument power is "ON". The display will read 0.0 with the Preset and Minutes lights illuminated.

c. Enter preset time by pushing the four white set pushbuttons corresponding to the correct digit place (e.g., tenths, minutes, ten minute increments, etc.). Each pushbutton corresponds to the digit directly above it.

d. The red reset button will reset the preset time to zero and clear the counting registers.

e. Press the count pushbutton to start a count. The display will show the elapsed time until the count is complete. Ensure the analyzer switch is in CH1 to display counts in Channel 1.

f. By pressing the hold button after the count is complete the instrument will display preset minutes, counts per minute, elapsed minutes and elapsed counts. The hold button must be pressed again to change between each display.

2.2 Sample Counting

a. Perform a 2 minute background count before each group of samples is counted. Ensure Analyzer switch is set to CH 1.

b. This background is to be subtracted from the gross count on the sample to obtain the net counts.

c. Place sample in a calibrated geometry and start a 2 minute count.

d. Read the LED net count digital display.

e. Calculate and record the net counts.

2.3 To determine I-131 activity in μCi/cc use the following formula:

$$\frac{\text{(Net Counts)}}{\text{(Flow Time) (in min)} \times \text{(Flow Rate) (in cfm)} \times \text{(Count Time) (in min)} \times \text{(Efficiency)} \times (28317) \times (2.2\ E+6)}$$

ATTACHMENT 7: COUNTING EQUIPMENT SET-UP AND OPERATION Cont.)

3.0 Daily Checks and Set-up: Bicron FriskTech

3.1 Check Instrument for Physical Damage

3.2 Connect detector

3.3 Turn instrument "on".

3.4 Plug in FriskTech to 115 volt AC 60 Hz source OR verify battery reads in "BAT OK" region of the meter.

3.5 If the battery does not read in the "BAT OK" region, the instrument shall be used with AC power.

3.6 Verify controls are set as follows (adjust as necessary):

a. Response knob in middle of range

b. Volume knob in middle of range

c. Set speaker to "pulse/alarm"

3.7 Background Determination

a. Set ratemeter to X1

NOTE 3.7.b

Preset count time equals one (1) minute.

b. Press the red "meter reset" count button to start count

c. Perform two, one (1) minute background counts

d. Average background counts

e. Retain average for use in Step 3.8.f

Note 3.8

Acceptable source range is identified on top of instrument.

3.8 Source Response Check

a. Select Tc-99 source described on top of instrument

b. Set ratemeter to X10 scale

ATTACHMENT 7: COUNTING EQUIPMENT SET-UP AND OPERATION Cont.)

c. Insert Tc-99 source into calibrated geometry

1. Ensure source writing faces away from the detector

d. Perform two, one (1) minute source counts using Tc-99 source

e. Press the red "meter reset" count button to start count

f. Subtract background counts-per-minute (cpm) from source cpm

g. Compare source net counts to posted value on top of instrument

h. Initial the daily check sticker indicating satisfactory response

4.0 FriskTech Operation

4.1 Operation

a. Ensure instrument power is "on".

b. Verify response knob in middle of range

c. Set ratemeter to X1 scale

Note: 4.2

Record results of analysis on Attachment 12 or 13 as applicable

4.2 Sample Counting

a. Perform a one (1) minute background in fixed geometry

b. Push "meter reset" button

c. Count light will extinguish when count is complete

d. Record results of background count

e. Place sample in calibrated geometry

f. Start a 1 minute count by pushing "meter reset"

g. Count light will extinguish when count is complete

h. Read the digital count display

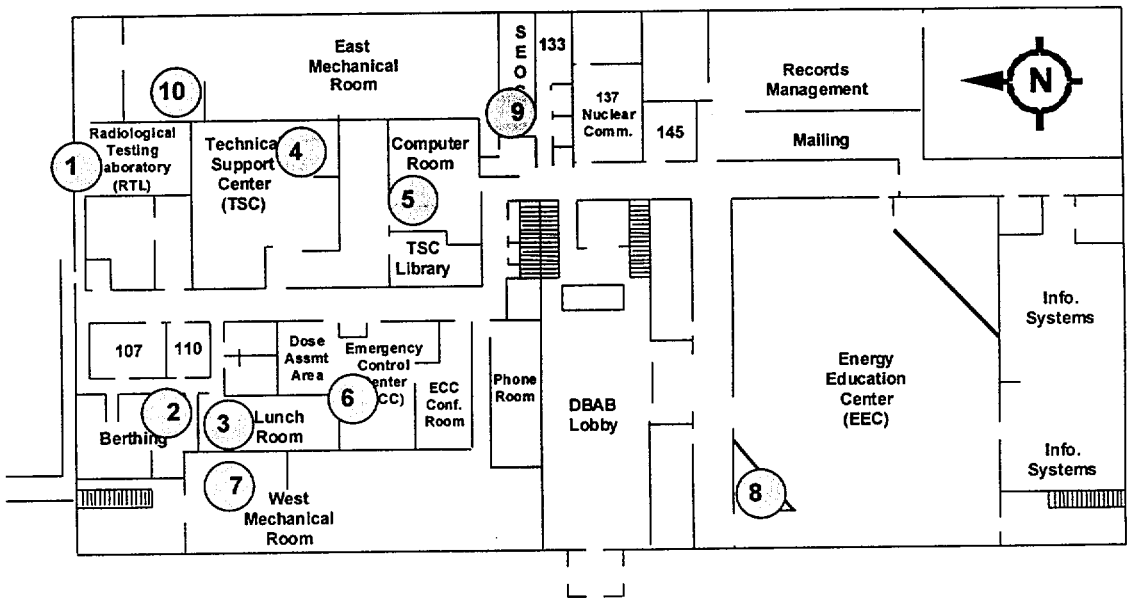
i. Calculate and record the net counts

ATTACHMENT 8: DBAB AREA MONITORING STATIONS

Name(s) _____ Date_____ Time _____

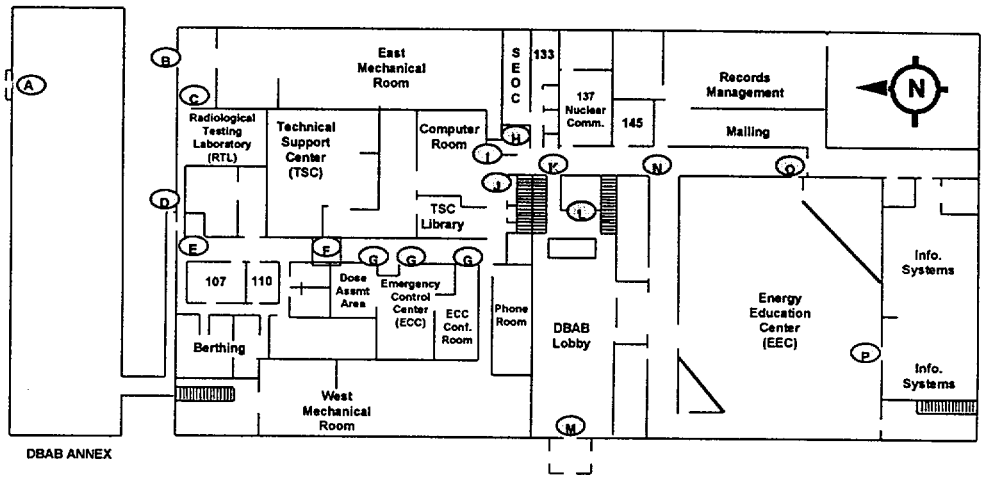
_____

DAVIS-BESSE ADMINISTRATION BUILDING



Monitor #	Area Description	TLD #	SRD # (5-digit)	SRD mRem	Time		SRD mRem	Time
1	Radiological Testing Laboratory							
2	DBAB Decon Area (Use Annex master key)							
3	Lunch Room							
4	Technical Support Center (TSC)							
5	Computer Room							
6	Emergency Control Center (ECC)							
7	West Mechanical Equipment Room							
8	Projector Room (Use DBAB Master key)							
9	SEOC (Use DBAB Master key)							
10	East Mechanical Equipment Room							

ATTACHMENT 9: DBAB MAP



DAVIS-BESSE ADMINISTRATION BUILDING

- (A) N. DBAB Annex Door
- (B) NE. DBAB Entrance Door
- (C) RMT Access Door
- (D) N. Entrance Double Doors
- (E) RTL Door
- (F) TSC
- (G) ECC
- (H) DBAB East Mechanical Room Door
- (I) Computer Room Door
- (J) South Badging Station Hallway Door
- (K) Lobby to Hallway Door
- (L) DBAB Elevator
- (M) DBAB Lobby Doors
- (N) EEC Lobby to Hallway Door
- (O) EEC to Hallway Door
- (P) EEC to Info. Systems Door

ATTACHMENT 10: CONTINUOUS AIR MONITOR OPERABILITY CHECK

1. Ensure a Particulate filter is in the Particulate channel holder as follows:
   a. Ensure SW-2, the pump switch, is off (under the CAM top).
   b. Ensure SW-1, power switch, is off (under the CAM top).
   c. Loosen the two thumbscrews securing the left-most filter assembly (bottom left of CAM) and carefully remove the assembly from the shield.
   d. To replace filter paper:
      1. Remove the ring which is fitted over the old filter paper and remove the old filter paper.
      2. Put the new filter paper on the screen, rough side out.
      3. Slip the ring straight over the filter paper without rotation and push it down firmly.
   e. Carefully reinsert the filter assembly into the shield and tighten the thumb screws.
2. Ensure a silver zeolite cartridge is in the Iodine channel holder as follows:
   a. Ensure that SW-1 AND SW-2 ARE OFF.
   b. Loosen the two thumbscrews securing the right-most assembly and remove the assembly from the shield.
   c. To replace cartridge:
      1. Gently pull the cartridge out of the cartridge holder (a slight twisting motion may be needed).
      2. Handle the cartridge by the metal edges.
      3. Insert a new silver zeolite cartridge into the holder ensuring arrow points in the direction of flow (toward bulk of the filter housing).
   d. Insert the assembly into the shield.
3. Ensure the CAM power cord is plugged into an 120V AC power source.
4. Lift the top of the CAM and check that the CRT, PIOPS and Paper Take Up Power cords are plugged into the receptacles.

ATTACHMENT 10: CONTINUOUS AIR MONITOR OPERABILITY CHECK (Cont.)

5. Turn on SW-1 and SW-2.

6. Maintain Flow Rate between 1.5 and 2.5 cfm by moving the high and low flow control indicators on the photohelic guage.
7. Recorder Paper and Pens

   a. Open the recorder cover

   b. Remove the pen covers by removing and replacing the cartidges one at a time.

   c. Ensure both toggle switches are in the "ON" position.

   d. Move pen lift lever up until all three pens are contacting and producing a trace on the chart paper.

   e. Roll the chart so that the correct time of day is being displayed.

   f. Write the date and time on the chart at the starting point.

   g. IF a blue line starts to appear in the left-hand margin of the chart paper, THEN replace the chart.

8. Check Source

   a. Connect the keypad to the CAM and put the unit in the LOCAL mode of operation as follows:

      1. Press 1, "Change Local Status". (If "Change Local Status" not available in menu, press "0".)

      2. Enter the 4-digit security password. (1562)

   b. Press 3, "Control Check Source/diagnostics".

   c. Insert each check source one at a time to verify detector response.

      1. Enter 1 to cause the check source for the selected channel to be inserted or retracted.

      2. When the check source is inserted, observe the flashing status block in the CSI column for the specific channel.

      3. IF insertion of the check source produce an upscale CPM reading on the CRT display, THEN the detector response is satisfactory.

ATTACHMENT 10: CONTINUOUS AIR MONITOR OPERABILITY CHECK (Cont.)

4. IF Alert and/or High Alarm goes off, retract source, THEN press ACK on keypad.

5. IF upon check source insertion no response in cpm on the detector is observed, THEN tag the CAM with a maintenance information tag.

6. Repeat steps 1 through 5 for channels 2 and 3.

d. Ensure all check sources are retracted.

e. Press "0", "Exit".
f. Get out of Local Mode by pressing 1.

g. Initial the Daily Instrument Check Sticker.

9. CAM power down

a. Turn off switches SW-1 and SW-2.

b. Disconnect keypad and close top

c. Replace caps on inking pens

d. Unplug CAM power cord from 120 VAC source.

ATTACHMENT 11: AIR SAMPLE ANALYSIS WORKSHEET

Sample Taken By: _____ Date: _____

Sample Location: _____ Sample I.D. No.: _____

Sample Collection Time: _____ min. (a)

Air Sampler L.I. No.: _____ Air Sampler Flow Rate: _____ cfm (b)

IODINE CARTRIDGE AND FILTER PAPER

Counter _____ L.I. No. _____ Eff.: _____ (c)

Count Time _____ min (d) Total Counts _____ (e)

Sample cpm (e/d) = _____ cpm (f) Background = _____ cpm (g)

Net Sample cpm (f-g) _____ cpm (h)

$$\text{I-131 } \mu\text{Ci/cc} = \frac{(\text{h}\_\_\_\_\_)\,(1.77\text{ E-}11)}{(\text{a}\_\_\_\_\_)\,(\text{b}\_\_\_\_\_)\,(\text{c}\_\_\_\_\_)} = \_\_\_\_\_\ (\text{j})$$

(j_____) (Correction factor* _____) = _____ Rem/hr to Thyroid

---

PARTICULATE FILTER ONLY

Counter _____ L.I. No. _____ Eff.: _____ (k)

Background cpm _____ (l) Filter cpm _____ (m)

Net Filter cpm (m-l) _____

$$\text{Gross beta} = \frac{(\text{m}\_\_\_\_\_)\,(1.59\text{ E-}11)}{(\text{a}\_\_\_\_\_)\,(\text{b}\_\_\_\_\_)\,(\text{k}\_\_\_\_\_)} = \_\_\_\_\_\ \frac{\mu\text{Ci}}{\text{cc}}$$

* from Table 1, Radioiodine Correction Factor

ATTACHMENT 11: AIR SAMPLE ANALYSIS WORKSHEET (Cont.)

Table 1

Radioiodine Correction Factor

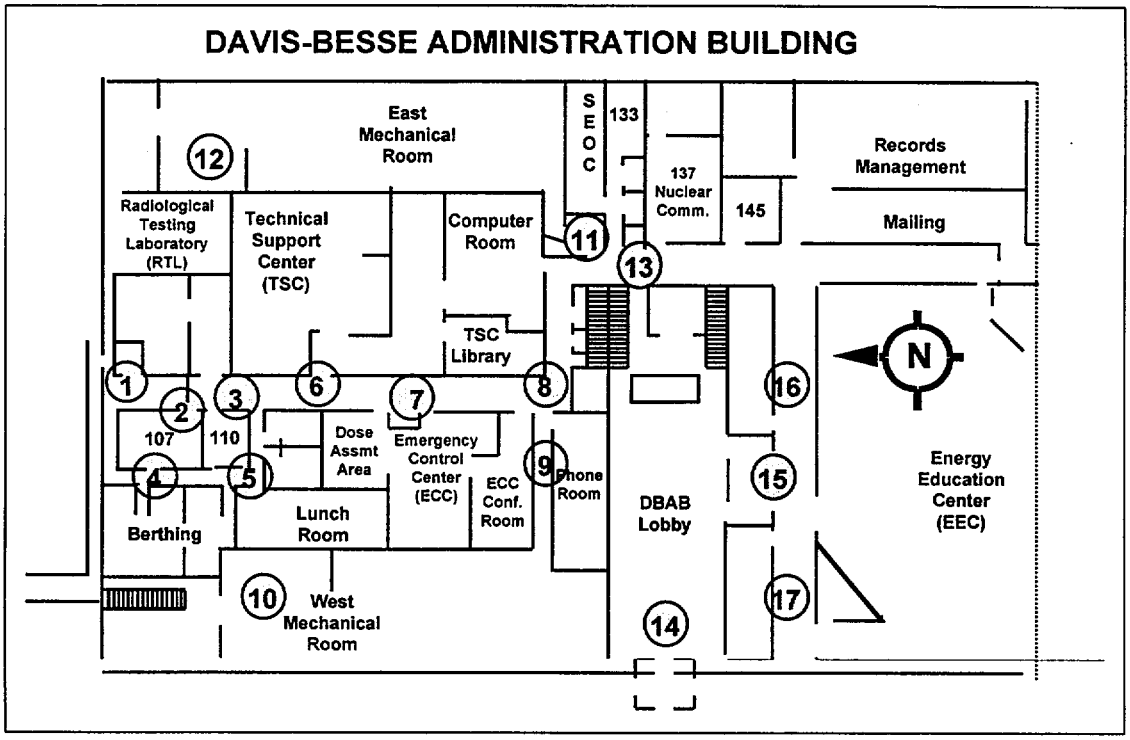
Hours After Reactor Shutdown	Correction Factor	Hours After Reactor Shutdown	Correction Factor	Hours After Reactor Shutdown	Correction Factor
0	2.88 E+06	21	2.32 E+06	54 - 55	2.02 E+06
0.5	2.86 E+06	22	2.31 E+06		
1	2.83 E+06	23	2.29 E+06	56 - 57	2.01 E+06
1.5	2.81 E+06	24	2.28 E+06		
2	2.79 E+06	25	2.27 E+06	58 - 59	2.00 E+06
2.5	2.77 E+06				
				60 - 61	1.99 E+06
3	2.75 E+06	26	2.25 E+06		
3.5	2.73 E+06	27	2.24 E+06	62 - 64	1.98 E+06
4	2.71 E+06	28	2.23 E+06		
4.5	2.70 E+06	29	2.22 E+06	65 - 67	1.97 E+06
5	2.68 E+06	30	2.21 E+06		
				68 - 70	1.96 E+06
5.5	2.67 E+06	31	2.19 E+06		
6	2.65 E+06	32	2.18 E+06	71 - 73	1.95 E+06
6.5	2.64 E+06	33	2.17 E+06		
7	2.62 E+06	34	2.16 E+06	74 - 77	1.94 E+06
7.5	2.61 E+06	35	2.15 E+06		
				78 - 81	1.93 E+06
8	2.59 E+06	36	2.14 E+06		
8.5	2.58 E+06	37	2.14 E+06	82 - 86	1.92 E+06
9	2.57 E+06	38	2.13 E+06		
9.5	2.55 E+06	39	2.12 E+06	87 - 92	1.91 E+06
10	2.54 E+06	40	2.11 E+06		
11	2.52 E+06	41	2.10 E+06	93 - 98	1.90 E+06
12	2.49 E+06	42	2.10 E+06		
13	2.47 E+06	43	2.09 E+06	99 - 107	1.89 E+06
14	2.45 E+06	44	2.08 E+06		
15	2.43 E+06	45	2.07 E+06	108 - 118	1.88 E+06
16	2.41 E+06	46 - 47	2.06 E+06	119 - 135	1.87 E+06
17	2.39 E+06				
18	2.37 E+06	48 - 49	2.05 E+06	136 - 173	1.86 E+06
19	2.36 E+06				
20	2.34 E+06	50 - 51	2.04 E+06	≥174	1.85 E+06
		52 - 53	2.03 E+06		

ATTACHMENT 12: DBAB SURVEY SHEET

Surveyor(s)_____ Date/Time_____

Area Radiation Survey Meter _____ Area Contamination Survey Meter _____

L.I. #_____ Cal. Due Date _____ L.I. #_____ Cal. Due Date _____



Location	1	2	3	4	5	6	7	8
mRem/hr								
cpm								

Location	9*	10*	11	12*	13	14	15	16	17
MRem/hr									
cpm									

*Tile Areas Cpm/100 cm^2

Smear Analysis:

Instrument Used _____ L.I. # _____ Cal. Due Date _____ Bkg._____

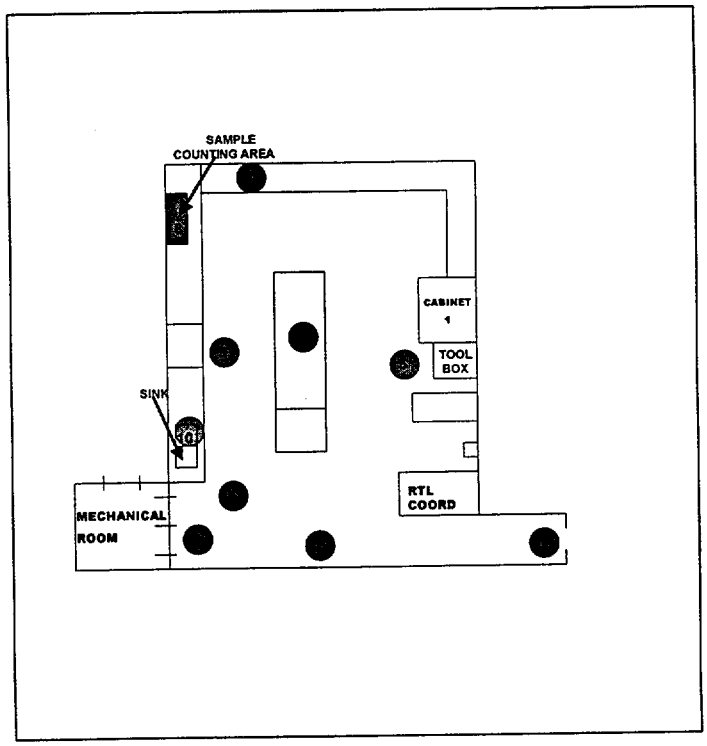
Smears Counted by _____ Date/Time _____

ATTACHMENT 13: RTL SURVEY SHEET

Surveyor(s)_____ Date/Time_____

Area Radiation Survey Meter _____ L.I. #_____ Cal. Due Date _____

RTL SURVEY MAP



Location	R1	R2	R3	R4	R5
mRem/hr					
Cpm/100 cm^2					

Location	R6	R7	R8	R9	R10
MRem/hr					
Cpm/100 cm^2					

Smear Analysis:

Instrument Used _____ L.I. # _____ Cal. Due Date _____ Bkgd. _____

Smears Counted by _____ Date/Time _____

ATTACHMENT 14: ESTIMATE OF CEDE FROM RADIOIODINES

1. Complete the following:

Name_____ Social Security # _____
_

Date _____ Time _____

TLD # _____ RMT # _____

2. Determine the radioiodide activity at the sample location:

$$\frac{\text{(Net CPM on } I_2 \text{ cartridge/particulate filter)}}{\text{(Total volume in cubic feet)}} \times \frac{4.2\text{ E -9}}{\text{(Conversion Factor)}} = \frac{\text{(}\mu\text{ ci/cc)}}{\text{(radioiodide activity)}}$$

3. Determine the committed dose equivalent (CDE) rate to the thyroid:

$$\frac{\mu\text{ ci/cc}}{\text{(radioiodide activity, From 2.)}} \times \frac{}{\text{(Correction Factor)*}} = \frac{\frac{\text{mrem}}{\text{hr}}}{\text{(Thyroid CDE Rate)}}$$

*From Table 1, Radioiodine Correction Factor of this attachment.

4. Record the radiation dose rate at the radioiodide sampling locations in mrem/hr.

Closed – window dose rate _____ $\frac{\text{mrem}}{\text{hr}}$

ATTACHMENT 14: ESTIMATE OF CEDE FROM RADIOIODINES (Cont.)

5. Determine the committed effective dose equivalent (CEDE)/Deep Dose Equivalent (DDE) Ratio:

$$\frac{\frac{\text{mrem}}{\text{hr}}}{\text{(CDE rate, From 3.)}} \times \frac{\text{(weighting factor)}}{\frac{\text{mrem}}{\text{hr}}} = \frac{}{\text{CEDE/DDE ratio}}$$

$$\text{(DDE rate, From 4.)}$$

6. Determine the committed effective dose equivalent (CEDE) from radioiodides:

$$\frac{\text{mrem}}{\text{(SRD Reading in mrem)}} \times \frac{}{\text{(CEDE/DDE Ratio, From 5.)}} = \frac{\text{mrem}}{\text{CEDE}}$$

7. Determine the total effective dose equivalent (TEDE):

$$\frac{\text{mrem}}{\text{(SRD Reading in mrem)}} + \frac{}{\text{(CEDE, From 6.)}} = \frac{}{\text{TEDE}}$$

8. REPORT THE TEDE TO THE RTL COORDINATOR.

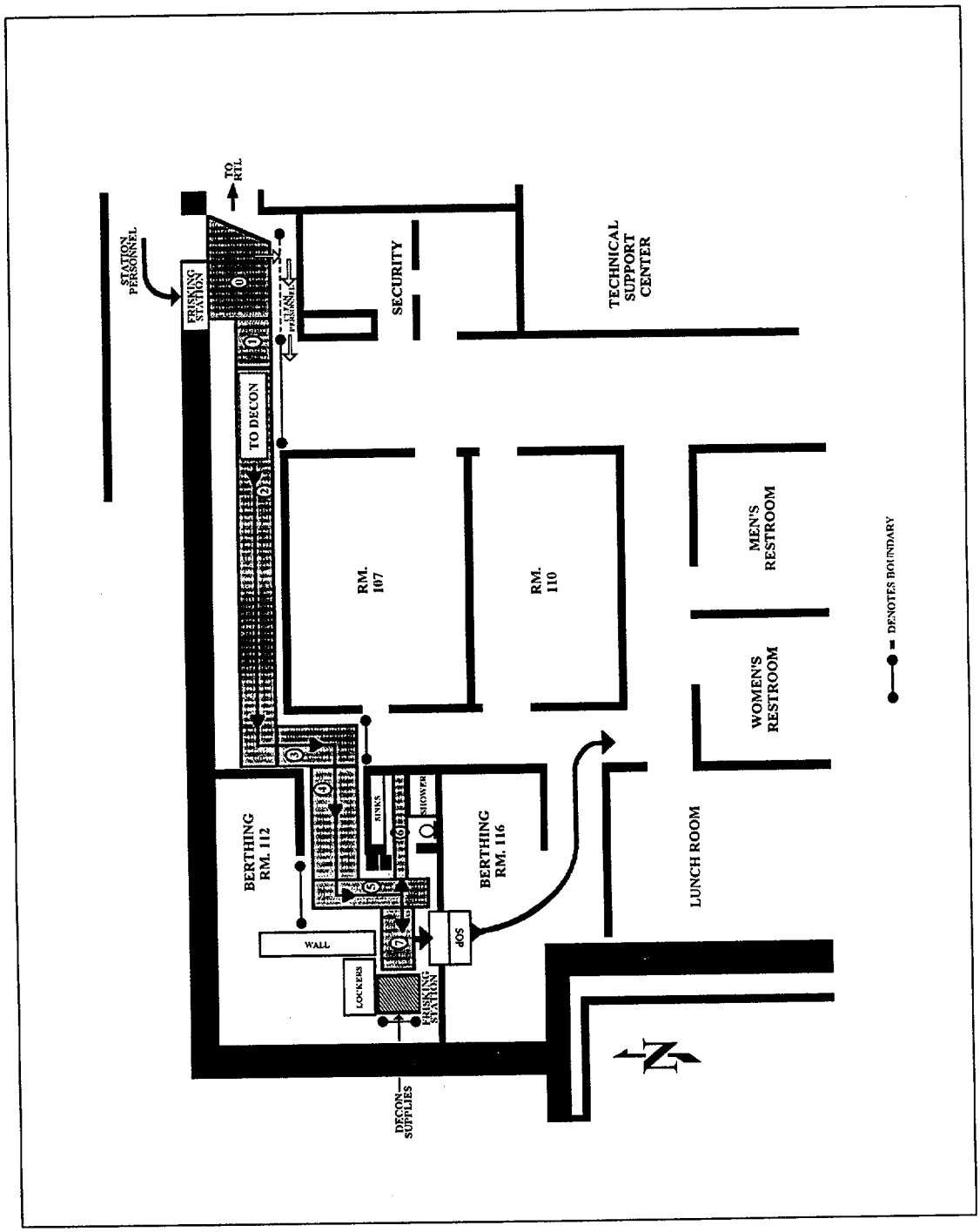
ATTACHMENT 14: ESTIMATE OF CEDE FROM RADIOIODINES (Cont.)

Table 1

Radioiodine Correction Factor

Hours After Reactor Shutdown	Correction Factor	Hours After Reactor Shutdown	Correction Factor	Hours After Reactor Shutdown	Correction Factor
0	2.88 E+09	21	2.32 E+09	54 - 55	2.02 E+09
0.5	2.86 E+09	22	2.31 E+09		
1	2.83 E+09	23	2.29 E+09	56 - 57	2.01 E+09
1.5	2.81 E+09	24	2.28 E+09		
2	2.79 E+09	25	2.27 E+09	58 - 59	2.00 E+09
2.5	2.77 E+09				
3	2.75 E+09	26	2.25 E+09	60 - 61	1.99 E+09
3.5	2.73 E+09	27	2.24 E+09		
4	2.71 E+09	28	2.23 E+09	62 - 64	1.98 E+09
4.5	2.70 E+09	29	2.22 E+09		
5	2.68 E+09	30	2.21 E+09	65 - 67	1.97 E+09
5.5	2.67 E+09	31	2.19 E+09	68 - 70	1.96 E+09
6	2.65 E+09	32	2.18 E+09		
6.5	2.64 E+09	33	2.17 E+09	71 - 73	1.95 E+09
7	2.62 E+09	34	2.16 E+09		
7.5	2.61 E+09	35	2.15 E+09	74 - 77	1.94 E+09
8	2.59 E+09	36	2.14 E+09	78 - 81	1.93 E+09
8.5	2.58 E+09	37	2.14 E+09		
9	2.57 E+09	38	2.13 E+09	82 - 86	1.92 E+09
9.5	2.55 E+09	39	2.12 E+09		
10	2.54 E+09	40	2.11 E+09	87 - 92	1.91 E+09
11	2.52 E+09	41	2.10 E+09	93 - 98	1.90 E+09
12	2.49 E+09	42	2.10 E+09		
13	2.47 E+09	43	2.09 E+09	99 - 107	1.89 E+09
14	2.45 E+09	44	2.08 E+09		
15	2.43 E+09	45	2.07 E+09	108 - 118	1.88 E+09
16	2.41 E+09	46 - 47	2.06 E+09	119 - 135	1.87 E+09
17	2.39 E+09				
18	2.37 E+09	48 - 49	2.05 E+09	136 - 173	1.86 E+09
19	2.36 E+09				
20	2.34 E+09	50 - 51	2.04 E+09	≥174	1.85 E+09
		52 - 53	2.03 E+09		

ATTACHMENT 15: DBAB MONITORING AND DECONTAMINATION STATION



COMMITMENTS

Step Number	Reference	Comments
1.0	TERMS O 07407	Perform onsite and offsite monitoring in accordance with this procedure.
4.0, 6.0, 7.0	TERMS O 13617	RMT & RTL Coordinator duties.
Attachment 1	TERMS O 14325	Types of survey meters in the RMT kits
6.3	TERMS Q 00784	Communications

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02260

(Supersedes HS-EP-02260 R4, C4)

Total Rewrite Without Revision Bars

DOCUMENTATION MANAGEMENT
CONTROL COPY
NO. 1165

RADIOLOGICAL CONTROLS IN THE DBAB

REVISION 00

Prepared by: _____ 03/16/01
Date

Sponsor: Dale E. Miller for D. H. Lockwood 3/16/01
Manager - Regulatory Affairs Date

Approved by: _____ 3/29/01
Director – Support Services Date

Approved by: _____ 3/29/01
Plant Manager Date

Effective Date: 4/6/01

Procedure Classification:

X Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:
IN-FIELD REFERENCE

LIST OF EFFECTIVE PAGES

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1.0 PURPOSE

This procedure describes actions and tasks performed or directed by the Radiological Testing Laboratory (RTL) Coordinator during the activation, operation, and deactivation of the RTL, and performance of the Radiation Protection activities in support of Emergency Response Operations in the Davis-Besse Administration Building (DBAB).

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.1.2 DB-HP-01439, Bicron Labtech

2.2 Implementation

2.2.1 RA-EP-00600, Emergency Facilities and Equipment Maintenance Program

2.2.2 RA-EP-02250, Radiation Monitoring Team Surveys

2.2.3 HS-EP-02550, Offsite Personnel and Vehicle Monitoring and Decontamination

2.2.4 RA-EP-02270, Facilities Support

3.0 DEFINITIONS

3.1 FRISKER - A count rate instrument used to check for contamination on personnel or equipment.

3.2 RADIATION PROTECTION ACTIVITIES - Actions or tasks performed by Radiation Monitoring Teams (RMTs) or the RTL Coordinator during radiological surveys, decontamination efforts, sample analysis and collections (environmental or air samples).

3.3 STEP-OFF-PAD (SOP) - A designated area (physical pad or area marked so as to define a boundary between clean and contaminated areas) which is utilized as a control point for contamination monitoring, or access to radiologically restricted areas.

4.0 RESPONSIBILITIES

4.1 The RTL Coordinator is responsible for implementation of this procedure.

4.2 The Supervisor - Emergency Preparedness is responsible for collection and submittal of records to Nuclear Records Management.

5.0 INITIATING CONDITIONS

5.1 An emergency has been declared and classified as an Alert, a Site Area Emergency, or a General Emergency.

5.2 At the direction of the Emergency Director.

6.0 PROCEDURE

6.1 RTL Activation

The RTL Coordinator shall:

6.1.1 Initialize the Radiological Testing Lab (RTL) log by logging the date, time and current emergency classification level.

6.1.2 Ensure all RTL personnel complete the RTL Status Board items.

6.1.3 Ensure all Radiation Monitoring Team (RMT) members are issued dosimeters, and that issuance documentation and qualifications are completed.

a. Verify qualifications for:
- Radiation Worker Training (RWT)
- Radiation Worker Exercise (RWE)
- Plant Access Training (PAT)

6.1.4 Ensure RMTs read the Potassium Iodide (KI) Administration form, ED 8057, and sign it if they agree to take KI should it be recommended.

6.1.5 Verify individual dose through the Access Control Database.

a. Ensure accurate dose determination is made.
b. Ensure approvals to exceed one Rem are obtained prior to exposing the individual.
c. Address personnel excluded from the Radiologically Restricted Area (RRA) because of qualifications or dose.

6.1.6 Assign RMT members to a field team or a DBAB team.

a. The first four RMTs should be assigned to field teams unless the Dose Assessment Coordinator determines that the field teams are not needed at this time.

b. If an RMT member's yearly exposure is greater than 1000 mrem, then consider assigning that RMT member to the DBAB.

c. If an RMT member does not agree to take KI, assign that RMT member to the DBAB.

NOTE: 6.1.7

- Dosimetry should be issued to the Access Road Security Station and the Warehouse at a Site Area Emergency, but no later than a General Emergency
- Dosimetry may be issued earlier with the concurrence of the Dose Assessment Coordinator.
- Supply chain personnel may also be located in the DBAB Annex.

6.1.7 Assign an RMT to prepare and distribute dosimeters to the Access Road Security Station and Warehouse in accordance with RA-EP-02250.

6.1.8 Notify the Dose Assessment Coordinator that the RTL is activated when the RTL is staffed with minimum staffing of the RTL Coordinator and five RMT members.

6.1.9 Notify the Dose Assessment Coordinator when a Radiation Monitoring Team is ready for deployment.

6.1.10 Depending on the nature of the emergency, the following actions shall be prioritized by the RTL Coordinator:

a. Direct the installation of a frisker at the south security station (Map Location J) and a frisker at the Plant Entrance Area (Map Location E) (see Attachment 1, DBAB Map).

b. Instruct the DBAB RMTs to prepare the RTL counting instruments for use in accordance with RA-EP-02250.

c. Instruct the DBAB RMTs to perform an operability check on the Continuous Air Monitor (CAM) in accordance RA-EP-02250.

d. Set up the DBAB Monitoring and Decontamination Station in accordance with RA-EP-02250.

e. Ensure that the Owner Controlled Area (OCA) Supervisor is notified that the berthing area hallway access door will be opened.

f. Assign a DBAB RMT to prepare radiologically posted containers in the RTL for:

1. Storage of contaminated environmental samples.
2. Storage of contaminated air samples and smears.
3. Contaminated waste for disposal.
4. Contaminated materials and equipment awaiting decontamination.

6.1.11 Monitor communications on the Radiological Data Loop, as appropriate.

6.2 RTL Operation

The RTL Coordinator shall:

6.2.1 Direct a DBAB RMT to perform an initial DBAB habitability survey when notified of a release, if background should increase, or at the direction of the Dose Assessment Coordinator. The surveys should include:

a. Area radiation readings.

b. Smear surveys of DBAB entrances.

c. Documentation of survey results in accordance with RA-EP-02250.

6.2.2 Log survey results.

6.2.3 Ensure radiological surveys (radiation and contamination levels) are performed in DBAB on a periodic basis, or as requested by the Dose Assessment Coordinator.

6.2.4 IF a release of radioactive material has occurred from the plant, OR the Dose Assessment Coordinator /RTL Coordinator determines there is a need,
THEN direct monitoring and decontamination of personnel accessing the DBAB through the north security station. Personnel shall monitor themselves at the frisker station until the individual is determined to be free of contamination or decontamination of the individual is initiated.

6.2.5 Ensure contaminated personnel are issued shoe covers and gloves, and directed to the DBAB decontamination station for decontamination.

6.2.6 Contact the Emergency RP Manager to coordinate further decontamination efforts or transportation to offsite medical facilities for personnel that cannot be successfully decontaminated.

6.2.7 Assign a DBAB RMT to read and document DBAB area SRD readings on a regular basis, or when requested by the Dose Assessment Coordinator.

6.2.8 At the direction of the Dose Assessment Coordinator, in the event of an imminent release or if a release is in progress, the RTL Coordinator shall instruct the Emergency Security Manager to secure the front lobby entrance to the DBAB.

NOTE 6.2.9

DBAB ventilation and potable water are isolated by the Emergency Facilities Servies Manager using RA-EP-02270, Facilities Support.

6.2.9 IF DBAB area SRDs or DBAB radiological surveys indicate an individual's total dose will exceed 100 mrem (above background) in less than one year, OR exceed dose rates of 2 mrem/hr,
THEN:

a. Notify the Dose Assessment Coordinator.

b. Recommend to the Dose Assessment Coordinator, that all nonessential personnel be evacuated.

c. Notify the Dose Assessment Coordinator of any abnormal air sample results.

d. Document completion of sample analysis and results in the RTL log.

6.2.10 Ensure environmental samples collected by field RMTs are:

a. Properly packaged

b. Properly labeled

c. Recorded on a sample log before placing in the storage area.

6.2.11 Assist or direct DBAB RMTs in decontamination and verification monitoring in accordance with HS-EP-02550, Offsite Personnel and Vehicle Monitoring and Decontamination, if required.

6.2.12 Contact the Dose Assessment Coordinator and request additional RMT members be called in as required.

6.3 RTL Deactivation

The RTL Coordinator shall:

6.3.1 Perform or direct actions and tasks to return the RTL and equipment to a pre-activation state of readiness.

6.3.2 Ensure environmental samples are properly handled and stored before shipment.

6.3.3 Arrange for the disposition of accumulated radwaste and items which require onsite decontamination.

6.3.4 Ensure appropriate records and documentation are completed and forwarded to the Supervisor - Emergency Preparedness.

6.3.5 Direct the DBAB RMTs to perform deactivation in accordance with RA-EP-02250.

6.3.6 Assign an RMT to collect dosimeters and documentation from the Access Road Security Station and return them to the RTL.

6.3.7 Assign an RMT to collect personnel dosimeters and issuance documentation from the DBAB north and south security stations and return them to the RTL.

6.3.8 Assign an RMT to collect DBAB area dosimeters and document final SRD readings.

6.3.9 Contact RP and arrange for the reading of TLDs (DBAB personnel, RTL personnel, Access Road Security Station and Warehouse, and DBAB Area TLDs) used during the emergency response.

6.3.10 Shutdown and restore the DBAB Monitoring and Decontamination Station:

a. Perform a radiological survey to verify the area is not contaminated.

b. Decontaminate areas and equipment found to be contaminated.

c. Bag and label all contaminated materials and prepare for transport to RP for final disposition.

d. Remove all postings and return the area to the pre-activation condition.

6.3.11 Debrief the RMTs and forward comments and suggestions to the Dose Assessment Coordinator.

7.0 FINAL CONDITIONS

7.1 All records generated have been reviewed and submitted to the Supervisor - Emergency Preparedness.

7.2 All equipment and supplies have been returned to their normal storage locations, and inventory deficiencies noted for resupply.

7.3 The Dose Assessment Coordinator has been notified of any samples collected and stored pending transport offsite for analyses.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

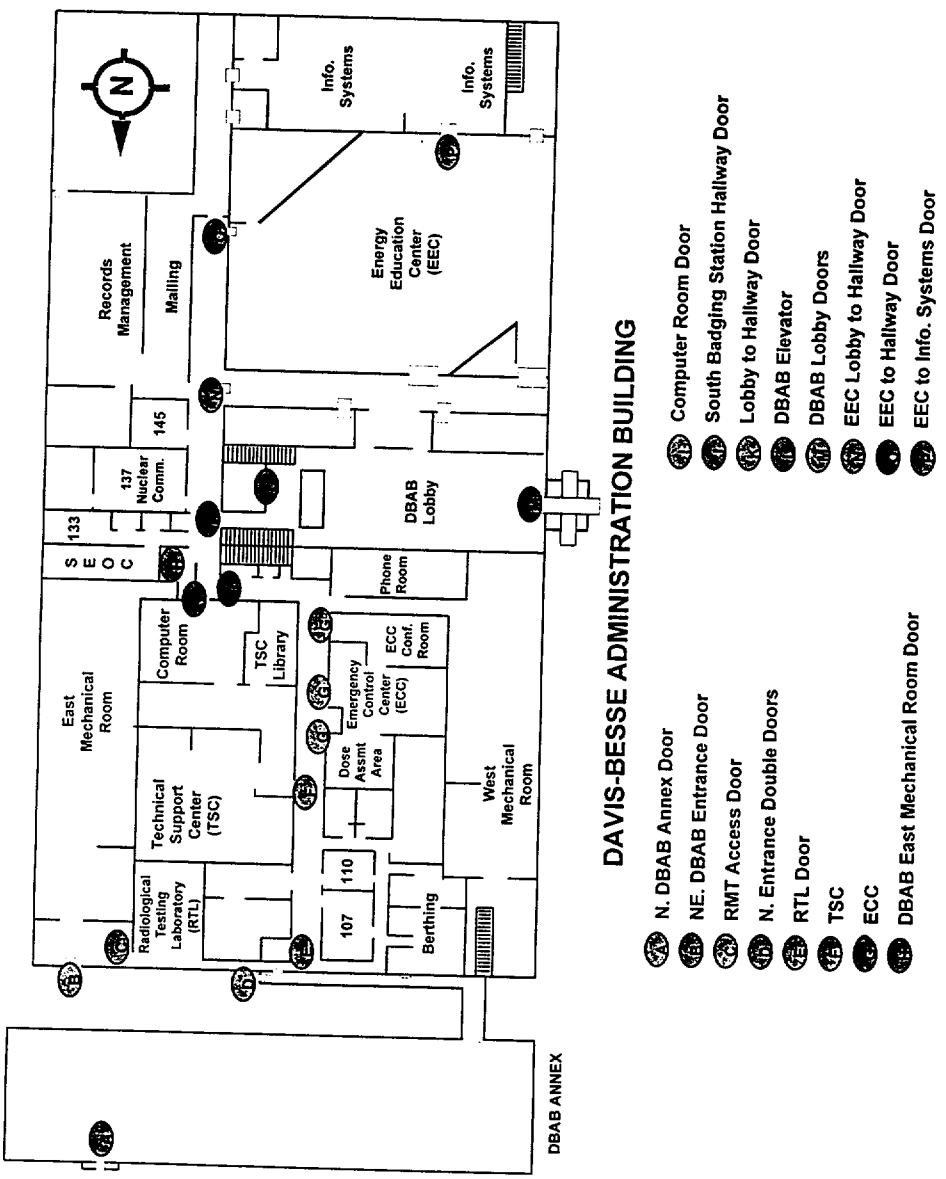
8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 None.

ATTACHMENT 1

DBAB MAP



COMMITMENTS

Section	Reference	Comments
None	None	None

END

Davis-Besse Nuclear Power Station

EMERGENCY PLAN IMPLEMENTING PROCEDURE

RA-EP-02270

(Supersedes RA-EP-02270, R0)

Facilities Support

REVISION 1

COMPLETE REWRITE, NO REVISION BARS

Prepared by: _____ 5/28/97
Date

Sponsor: _____ 5/28/97
Manager - Regulatory Affairs
Date

Approved by: Robert E Donnelly 6/6/97
Director - Engineering & Services
Date

Approved by: _____ 6-5-97
Plant Manager
Date

Effective Date: JUN 10 1997

Procedure Classification:

__X__ Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:

IN-FIELD REFERENCE

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1.0 PURPOSE

This procedure provides guidance to the Emergency Facilities Services Manager during an emergency at Davis-Besse Nuclear Power Station (DBNPS).

2.0 REFERENCES

2.1 Developmental

2.1.1 Davis-Besse Nuclear Power Station Emergency Plan

2.2 Implementation

2.2.1 NG-IS-00004, Fitness for Duty Program

2.2.2 Emergency Plan Telephone Directory

2.2.3 RA-EP-00600, Emergency Facilities & Equipment Maintenance Program

2.2.4 RA-EP-01500, Emergency Classification

2.2.5 RA-EP-02520, Assembly and Accountability

2.2.6 HS-EP-02530, Evacuation

2.2.7 RA-EP-02950, JPIC Activation and Response

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

The Emergency Facilities Services Manager shall be responsible for implementation of this procedure.

5.0 INITIATING CONDITIONS

5.1 At the declaration of an ALERT or higher-level emergency according to RA-EP-01500, Emergency Classification.

5.2 At the request of the Emergency Offsite Manager.

NOTE 6.0

Call-outs of all personnel are subject to the requirements of NG-IS-00004, Fitness for Duty Program.

6.0 PROCEDURE

6.1 Emergency Facilities Services Manager

6.1.1 Report to the Emergency Control Center (ECC) upon being notified of an emergency.

NOTE 6.1.2

The names and telephone numbers of Maintenance Services personnel are located in the Operations Support Center (OSC) Section of the Emergency Plan Telephone Directory (EPTD).

6.1.2 Contact additional Maintenance Services personnel to support the operations of the Davis-Besse Administration Building (DBAB) and the Emergency Response Facilities (ERFs) within the DBAB.

6.1.3 Provide assistance in contacting relief Emergency Response Personnel as directed by the Emergency Offsite Manager (EOM).

6.1.4 During normal working hours, communicate requests for additional Joint Public Information Center (JPIC) staffing from the EOM to those supplemental JPIC personnel assembled in the Energy Education Center (EEC). (Refer to RA-EP-02950)

6.1.5 Ensure that the uninterruptable power supply and the diesel generator are available in the event of a DBAB power failure.

a. Monitor the 8,000 gallon diesel fuel storage tank level. (Refer to Attachment 1: 8,000 Gallon Diesel Storage Tank Volume Chart.)

6.1.6 Ensure that the air conditioning unit located in the Computer Equipment Room is operating.

a. In the event a loss of power to this unit, manually restart in accordance with the instruction template located on the unit.

b. If manual restart is unsuccessful, turn by-pass knob (located on West wall adjacent to Unit) to convert to Zone 1 ventilation.

NOTE 6.1.7

Emergency supplies are stored in the Station Isolation Supply Trailers. Refer to RA-EP-00600, Emergency Facilities and Equipment Maintenance Program, for a complete inventory listing.

6.1.7 Ensure the following equipment, supplies and services to support the operations of the DBAB and the ERFs within the DBAB are provided, as required.

a. Food (emergency supply and/or catering service).

b. Cots and blankets.

c. Road maintenance (e.g., snow removal).

d. Phone service. (Contact Telecommunication Services.)

e. Organization of onsite and offsite shuttle services.

f. General maintenance and janitorial service.

g. Any other support as requested by the Emergency Offsite Manager.

NOTE 6.1.8

Refer to RA-EP-02520, Assembly and Accountability, and HS-EP-02530, Evacuation, for guidance.

6.1.8 Establish and maintain communications with the Assembly Area Coordinators in accordance with RA-EP-02520, Assembly and Accountability.

6.1.9 Update the Site and DBAB Conditions Status Board as required.

6.1.10 When notified by the NRC Liaison that an NRC Incident Response Team will be arriving, ensure that preparations are made for arrival of the team, using Section 6.6.

6.1.11 At the direction of the Dose Assessment Coordinator, assign Maintenance Services personnel to isolate the DBAB ventilation system and/or the Potable Water Storage Tank, using Sections 6.2 and 6.3.

6.1.12 Prior to restoration of the DBAB ventilation system, assist the Dose Assessment Coordinator in obtaining radiological surveys of the normally operated ventilation filter trains.

6.1.13 When authorized by the Dose Assessment Coordinator, direct Maintenance Services personnel to restore the DBAB ventilation system and/or the Potable Water Storage Tank to their normal operating configurations, using Sections 6.4 and 6.5.

NOTE 6.2
During Incident and By-Pass Mode operation, the Second Floor and Lobby areas of the DBAB are NOT habitable. Inform the Dose Assessment Coordinator of this condition.

6.2 Isolation of the DBAB Ventilation System

NOTE 6.2.1
If any of the following steps cannot be verified, notify the Emergency Facilities Services Manager or designee immediately.

6.2.1 DBAB Ventilation System Incident Mode.

a. Locate the DBAB Ventilation System Control Panel in the East Mechanical Room (Refer to Attachment 2, DBAB Ventilation Zones and Equipment Locations.)

b. Locate the "INCIDENT CONTROL" switch on the control panel. (Refer to Attachment 2, Page 4.)

NOTE 6.2.1.c

- Allow a few minutes for each of the following system changes to occur.
- Chillers may start, depending on the inside and outside temperatures. During cold weather (below 40°F.), the chillers will lock out and will NOT start.

CAUTION 6.2.1.c

DO NOT push the "RESET" button at the top of the panel or adjust the rheostat located in the middle of the panel.

c. Turn the "INCIDENT CONTROL" switch from the "DELTA" position to the "MANUAL" position.

d. Visually verify the following equipment operation:

1. East Mechanical Room Equipment
   a. MAU-1 Fan Motor has started
   b. AHU-1 Outside Air Damper M-13 is closed
   c. AHU-1 Outside Air Damper M-15 is closed

2. West Mechanical Room Equipment
   a. MAU-2 Fan Motor has started
   b. AHU-2 Outside Air Damper M-27 is closed
   c. AHU-2 Outside Air Damper M-30 is closed

(Continued)

6.2.1 (Continued)

e. IF the conditions of Step 6.2.1.d.1 are not met,
THEN, inform the Dose Assessment Coordinator that Zone #1 has NO ventilation and habitability may be compromised. Recommend switching to By-Pass Mode.

f. IF the conditions of Step 6.2.1.d.2 are not met,
THEN inform the Dose Assessment Coordinator that Zone #2 has NO ventilation and habitability may be compromised. Use of DBAB Lobby front doors should be minimized to maintain building positive pressures.

g. Visually verify that doors between ventilation zones are closed to ensure positive air pressure within the facility.

h. Stop AHU-3 and AHU-4 located in the Second Floor Mechanical Room from the Motor Control Center BE 30 E (Refer to Attachment 2, DBAB Ventilation Zones and Equipment Locations.)

   1. Turn knob located on AHU-3 Breaker Panel, BE 30 E1 from "AUTO" to "OFF" position.

   2. Turn knob located on AHU-4 Breaker Panel, BE 30 E5 from "AUTO" TO "OFF" position.

i. Visually verify the following equipment operation:

   1. Second Floor Mechanical Room Equipment
      a. AHU-3 Fan Motor has stopped
      b. AHU-3 Outside Air Damper M-2 is closed
      c. AHU-4 Fan Motor has stopped
      d. AHU-4 Outside Air Damper M-7 is closed

j. Inform the Dose Assessment Coordinator that Ventilation Systems for Zones #1 and #2 are isolated, when verification of all system changes is complete.

k. Report all equipment problems to the Emergency Facilities Services Manager.

NOTE 6.2.2

- If any of the following steps cannot be verified, notify the Emergency Facilities Services Manager or designee immediately.
- During By-Pass Mode operation, ventilation to Zone #2 is NOT operational. Inform the Dose Assessment Coordinator of this condition.

CAUTION 6.2.2.

Initiate and remain in the Incident Mode prior to initiating the By-Pass Mode.

6.2.2 DBAB Ventilation System By-Pass Mode

a. Locate the DBAB Ventilation System Control Panel in the East Mechanical Room (Refer to Attachment 2, DBAB Ventilation Zones and Equipment Locations.)

b. Locate the "BY-PASS CONTROL" switch on the control panel. (Refer to Attachment 2, Page 4.

NOTE 6.2.2.c

- Allow a few minutes for each of the following system changes to occur.
- Chillers may start, depending on the inside and outside temperatures. During cold weather (below 40° F.), the chillers will lock out and will NOT start.

CAUTION 6.2.2.c

- DO NOT push the "RESET" button at the top of the panel or adjust the rheostat located in the middle of the panel.
- The "INCIDENT CONTROL" switch must remain in the "MANUAL" position.

c. Turn the "BY-PASS CONTROL" switch from the "DELTA" position to the "MANUAL" position.

(Continued)

6.2.2 (Continued)

d. Visually verify the following conditions:

1. East Mechanical Room Equipment
   a. MAU-1 Fan Motor has stopped
   b. AHU-1 Outside Air Damper M-13 is open
   c. AHU-1 Outside Air Damper M-15 is closed

2. West Mechanical Room Equipment
   a. MAU-2 Fan Motor has started
   b. AHU-2 Outside Air Damper M-27 is closed
   c. AHU-2 Outside Air Damper M-30 is closed

3. Visually verify that doors between ventilation zones and the outside are closed.

4. Second Floor Mechanical Room Equipment
   a. AHU-3 Fan Motor has stopped
   b. AHU-3 Outside Air Damper M-2 is closed
   c. AHU-4 Fan Motor has stopped
   d. AHU-4 Outside Air Damper M-7 is closed

e. If directed by the Emergency Facilities Services Manager, verify the following equipment operation using the computer:

1. Lobby Equipment (Dampers located above ceiling)
   a. Isolation Damper M-20 has closed (computer point # 20615)
   b. Isolation Damper M-29 has closed (computer point # 20613)

2. Chiller #1 is running (based on inside and outside temperatures)

3. Chiller #2 is running (based on inside and outside temperatures)

f. Notify the Dose Assessment Coordinator that the Ventilation System for Zone #1 is isolated and Zone #2 ventilation is NO longer operational, when verification of all system changes is complete.

NOTE 6.3

If any of the following steps cannot be verified, notify the Emergency Facilities Services Manager or designee immediately.

6.3 Isolation of the Potable Water Storage Tank

6.3.1 Locate the 4000 Gallon Potable Water Storage Tank in the West Mechanical Room and complete Attachment 3, Page 2.

6.3.2 Notify the Dose Assessment Coordinator that the Potable Water Storage Tank is isolated.

6.3.3 Post the potable water warning signs on the restroom doors, drinking fountains, and lunchroom.

6.3.4 Periodically check the volume in the 4000 Gallon Potable Water Storage Tank.

NOTE 6.4

Restoring the DBAB Ventilation System to normal after being placed in the Incident or By-Pass Mode, should be directed by the Emergency Facilities Services Manager.

6.4 Restoration of the DBAB Ventilation System

6.4.1 Locate the DBAB Ventilation System Control Panel in the East Mechanical Room. (Refer to Attachment 2, DBAB Ventilation Zones and Equipment Locations.)

NOTE 6.4.2

- Allow a few minutes for each of the following system changes to occur.
- Chillers may start, depending on the inside and outside temperatures. During cold weather (below 40° F.), the chillers will lock out and will NOT start.
- If any of the following steps cannot be verified, notify the Emergency Facilities Services Manager or designee immediately.

CAUTION 6.4.2

DO NOT push the "RESET" button at the top of the panel or adjust the rheostat located in the middle of the panel.

6.4.2 Locate the "BY-PASS CONTROL" switch on the control panel (Refer to Attachment 2, Page 4).

a. IF the "BY-PASS CONTROL" switch is in the "MANUAL" position, THEN turn the "BY-PASS CONTROL" switch to the "DELTA" position.

6.4.3 Locate the "INCIDENT CONTROL" switch on the control panel. (Refer to Attachment 2, Page 4.)

6.4.4. Turn the "INCIDENT CONTROL" switch from the "MANUAL" position to the "DELTA" position.

6.4.5 Start AHU-3 and AHU-4 located in the Second Floor Mechanical Room from Motor Control Center BE 30 E. (Refer to Attachment 2, DBAB Ventilation Zones and Equipment Locations).

a. Turn knob located on AHU-3 Breaker Panel, BE 30 E1 from the "OFF" position to the "AUTO" position.

b . Turn the knob located on AHU-4 Breaker Panel, BE 30 E5 from the "OFF" position to the "AUTO" position.

6.4.6 Visually verify the following equipment operations:

a. East Mechanical Room Equipment
   1. MAU-1 Fan Motor has stopped
   2. AHU-1 Outside Air Damper M-13 is open
   3. AHU-1 Outside Air Damper M-15 is open

b. West Mechanical Room Equipment
   1. MAU-2 Fan Motor has stopped
   2. AHU-2 Outside Air Damper M-27 is open
   3. AHU-2 Outside Air Damper M-30 is open

c. Second Floor Mechanical Room Equipment
   1. AHU-3 Fan Motor has started
   2. AHU-3 Outside Air Damper M-2 is open
   3. AHU-4 Fan Motor has started
   4. AHU-4 Outside Air Damper M-7 is open

6.4.7 If directed by the Emergency Facilities Services Manager, verify the following equipment operation using the computer:

a. Lobby Equipment (Dampers located above ceiling)
   1. Isolation Damper M-20 is open (computer point # 20615)
   2. Isolation Damper M-29 is open (computer point # 20613)

b. Chiller #1 is shutdown (based on inside and outside temperatures)

c. Chiller #2 is shutdown (based on inside and outside temperatures)

6.4.8 Notify the Dose Assessment Coordinator that the DBAB Ventilation has been restored to normal operating configuration, when verification of all system changes is complete.

NOTE 6.5

- Restoration of the DBAB Potable Water Storage Tank should be directed by the Emergency Facilities Services Manager.
- If any of the following steps cannot be verified, notify the Emergency Facilities Services Manager or designee immediately.

CAUTION 6.5

In the event the 4000 Gallon Potable Water Storage Tank is emptied, bacterial testing may be needed once the tank is restored to normal operation.

6.5 Restoration of the Potable Water Storage Tank

6.5.1 Locate the 4000 Gallon Potable Water Storage Tank in the West Mechanical Room and complete Attachment 3, Page 3.

6.5.2 Notify the Dose Assessment Coordinator that the DBAB Potable Water Storage Tank has been restored to normal operating configuration.

6.5.3 Remove the potable water warning signs from the restroom doors, drinking fountains and lunchroom.

6.6 Preparation for the Arrival of the NRC Incident Response Team

6.6.1 Contact the Company Operator and request Telephone Services support for establishing NRC phone circuits.

6.6.2. Set up tables, chairs, and telephones as indicated on Attachment 4, Emergency Control Center Layout Map.

6.6.3. Ensure telephone circuits are operational at all NRC locations in the Technical Support Center and the Emergency Control Center.

6.6.4. Provide additional support as requested.

7.0 FINAL CONDITIONS

7.1 Any emergency equipment deficiencies have been identified and reported to the Supervisor - Emergency Preparedness.

7.2 All procedural deficiencies have been identified and reported to the Supervisor - Emergency Preparedness.

7.3 All DBAB Emergency Response Facilities have been deactivated.

7.4 All DBAB emergency equipment has been restored to its original condition.

7.4.1 Original power restored.

7.4.2 Original water system restored.

7.4.3 Original HVAC restored.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured, and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-NA-00106:

8.2.1 Attachment 3, Potable Water Storage Tank, Pages 2 and 3.

ATTACHMENT 1: 8,000 GALLON DIESEL STORAGE TANK VOLUME CHART

Inches	Volume	Days Until Empty
91	8,000	40
90	7,984	39
88	7,920	39
86	7,840	39
84	7,712	38
82	7,584	37
80	7,448	37
78	7,280	36
76	7,134	35
74	6,960	34
72	6,792	33
70	6,610	33
60	5,602	27
50	4,508	22
40	3,390	16
30	2,302	11
20	1,305	6
10	478	2

ATTACHMENT 2: DBAB VENTILATION ZONES AND EQUIPMENT LOCATIONS

Ventilation System - The DBAB first floor ventilation system consists of two air handling units, each supplying air to two separate zones. These units are controlled from the Ventilation System Control Panel. The control panel is located on the west wall of the East Mechanical Room.

Ventilation Zone One consists of the north half of the first floor (excluding West Mechanical Room and Computer Room), the Site Emergency Operations Center and the Public Relations Office. It is normally serviced by the ventilation unit in the East Mechanical Room.

Ventilation Zone Two consists of the south half of the first floor (excluding the Lobby and Records Management). It is normally serviced by the ventilation unit in the West Mechanical Room.

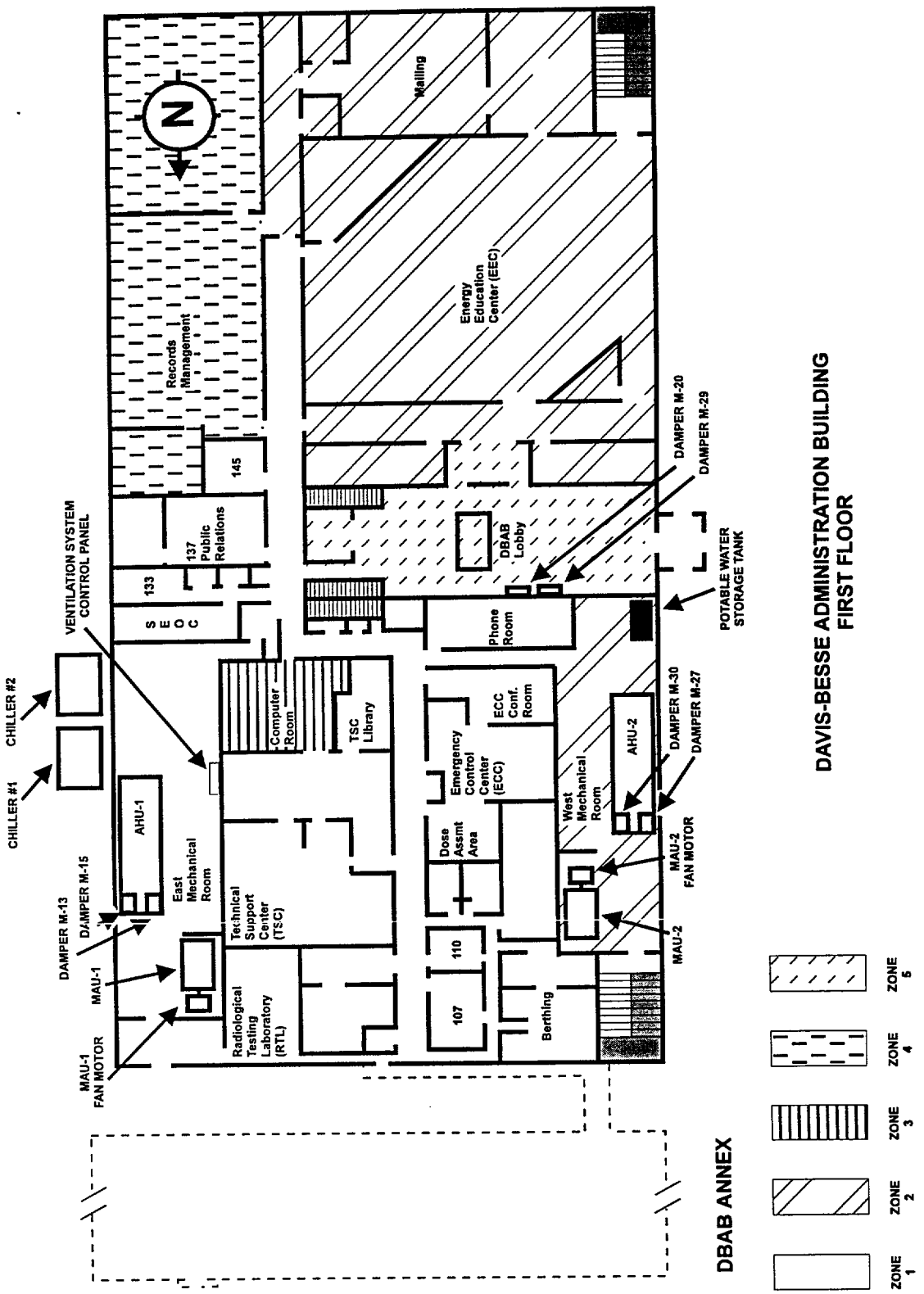
The ventilation controls include an Incident Control switch and a By-Pass Control switch. The Incident Control switch causes the ventilation system to filter and recirculate the air. The By-Pass Control switch shifts the Zone Two air recirculation system to Zone One, if the Zone One ventilation equipment fails.

Ventilation Zone Three consists of the computer equipment room. Zone Three is serviced by a self-contained unit. Make-up ventilation is provided from Zone One distribution system.

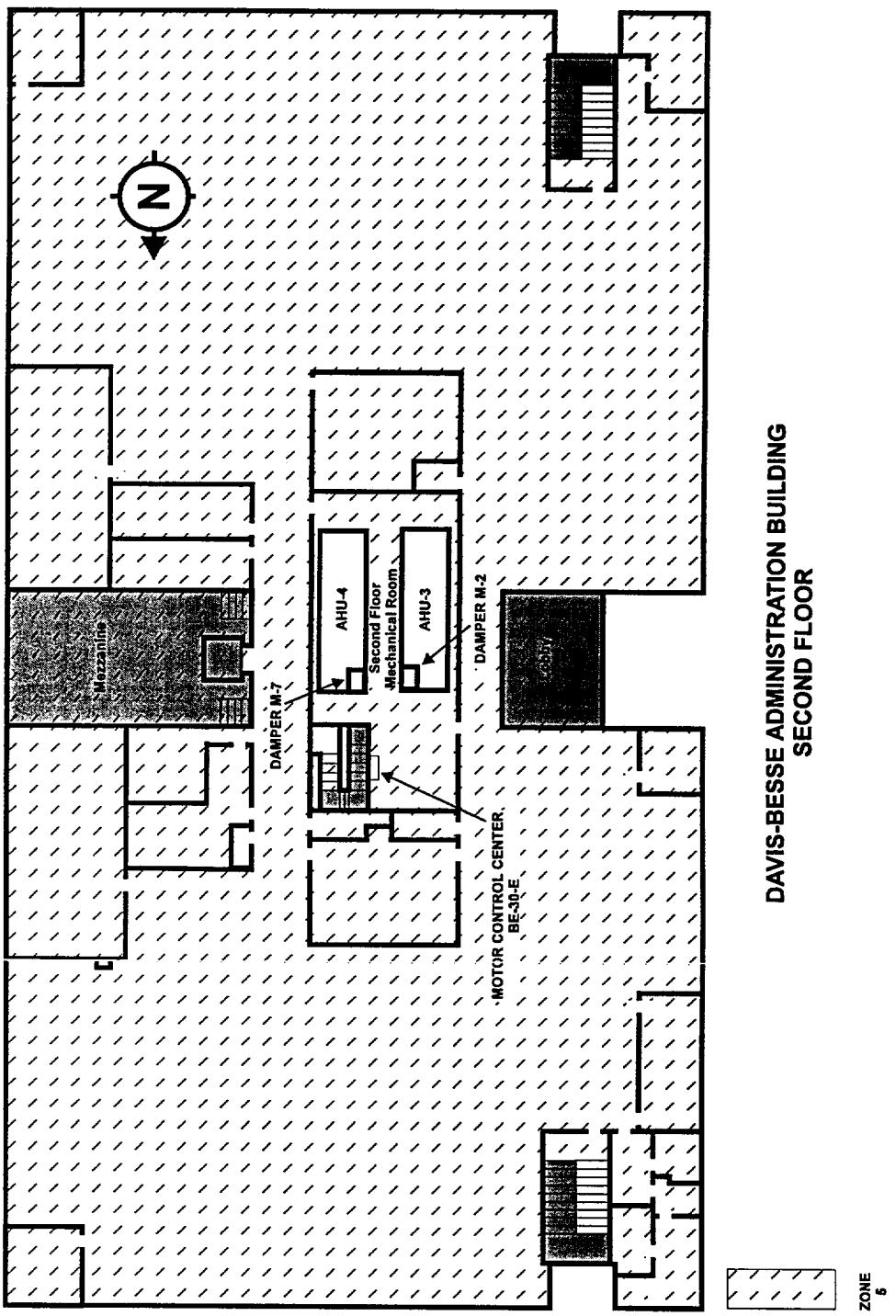
Ventilation Zone Four consists of the Records Management area and vault. Zone Four is serviced by a self-contained unit with ventilation air provided from the Zone One air distribution system.

Ventilation Zone Five consists of the Lobby, Mezzanine and DBAB 2nd floor, which is serviced by two air handling units on the DBAB 2nd floor.

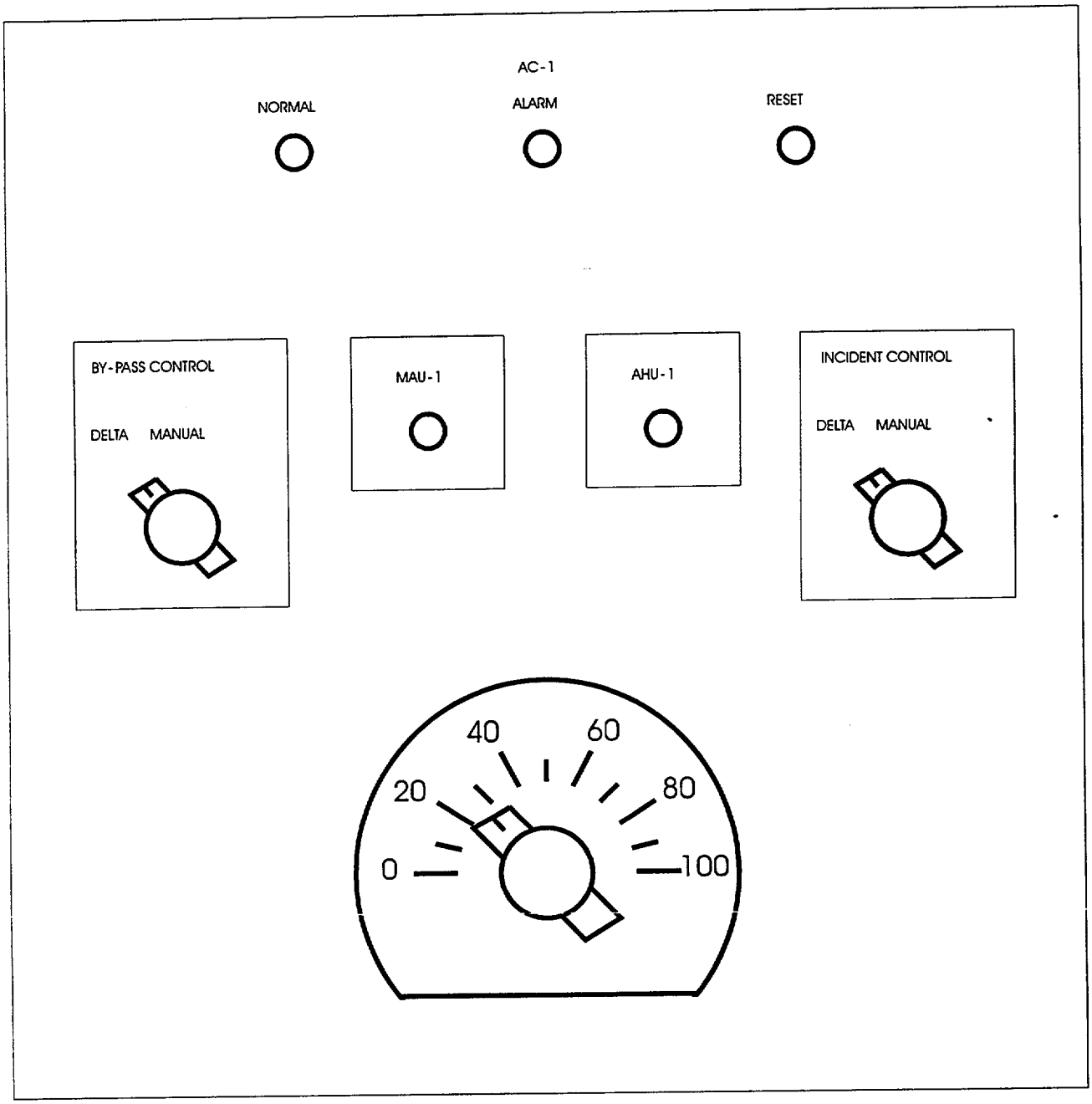
ATTACHMENT 2: DBAB VENTILATION ZONES AND EQUIPMENT LOCATIONS (Continued)



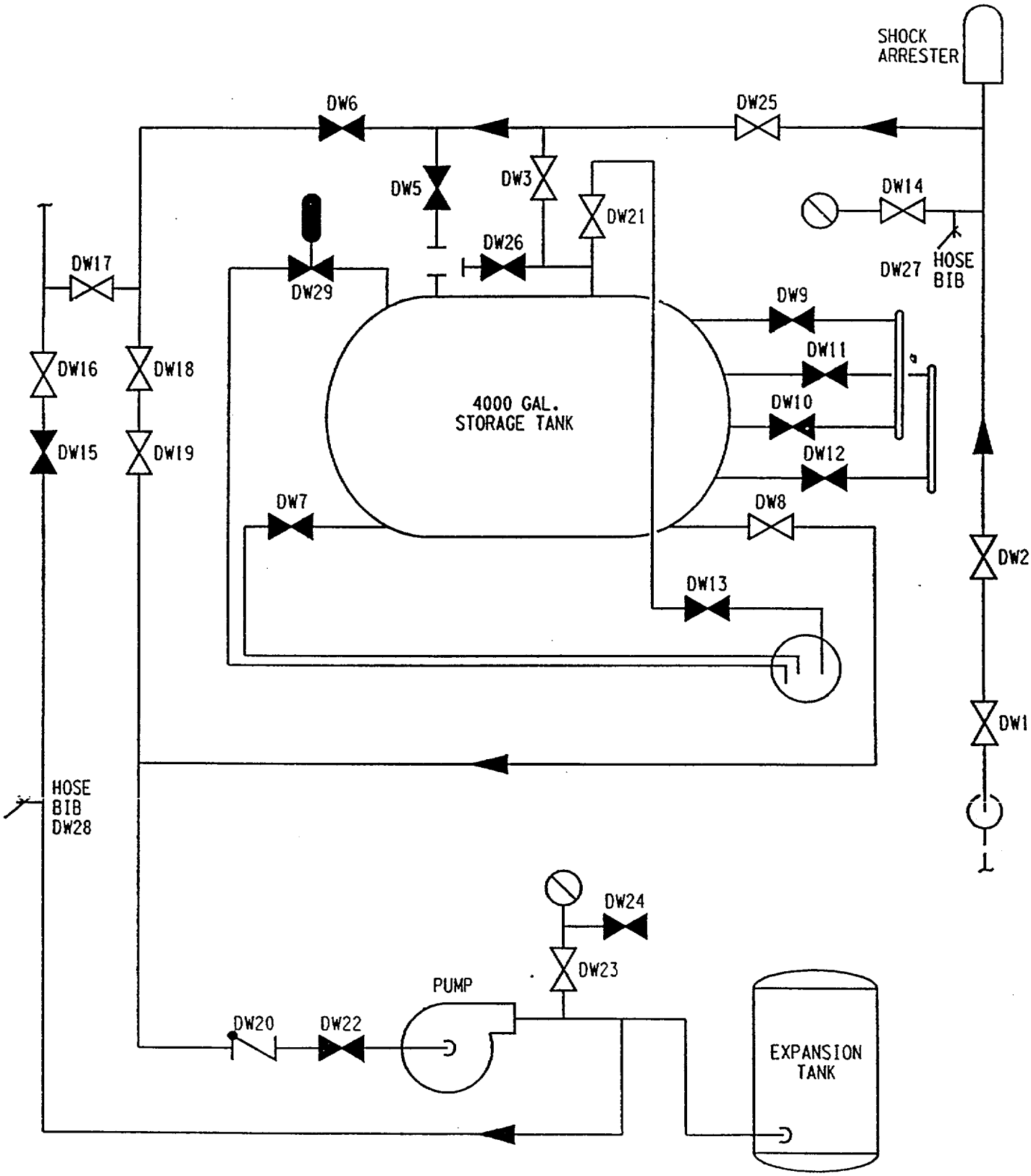
ATTACHMENT 2: DBAB VENTILATION ZONES AND EQUIPMENT LOCATIONS (Continued)



ATTACHMENT 2: DBAB VENTILATION ZONES AND EQUIPMENT LOCATIONS (Continued)



ATTACHMENT 3: POTABLE WATER STORAGE TANK



ATTACHMENT 3: POTABLE WATER STORAGE TANK (Continued)

ISOLATION

	Valve Number	Valve Position	Valve Description	Verified By
Step 1	DW 2	Close	DBAB Supply Isolation	
Step 2	DW 17	Close	Pump Bypass	
Step 3	DW 22	Open	Pump Suction	
Step 4	DW 15	Open	Pump Discharge	
Step 5	DW 19	Close	Tank Bypass	
Step 6	DW 9	Open	Upper Sightglass Isolation	
Step 7	DW 10	Open	Upper Sightglass Isolation	
Step 8	DW 11	Open	Lower Sightglass Isolation	
Step 9	DW 12	Open	Lower Sightglass Isolation	

Step 10 - Using the Storage Tank Water Level Site Glass ensure an adequate emergency water supply is available.

Step 11 - Open valve DW 13*

Step 12 - Close Pump Electrical Disconnect 19-21A, located on the South wall above pump (moving knife switch to the "ON" position will energize pump).

Step 13 - Crack open Valve DW 24. This will allow air in water lines to escape. After air escapes, close DW 24.

* This valve must be open to prevent negative tank pressure.

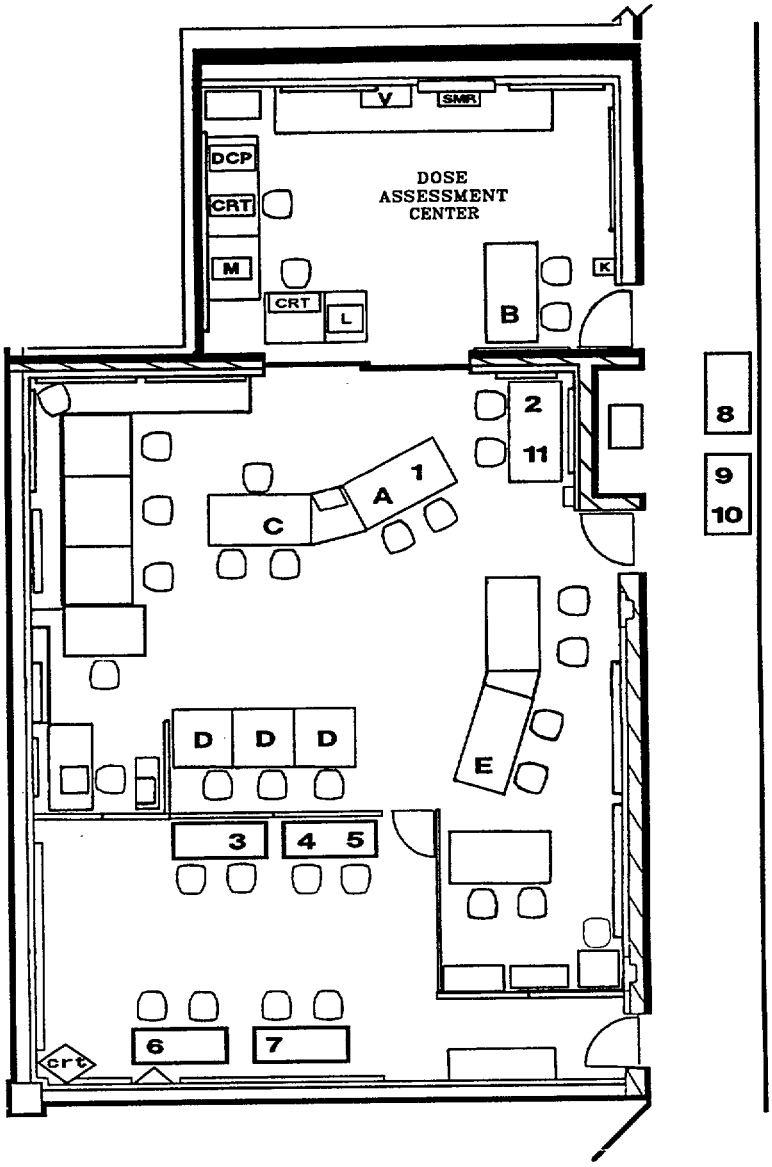
ATTACHMENT 3: POTABLE WATER STORAGE TANK

RESTORATION

Step 1 - Open Electrical Disconnect 19-21A, located on the South wall above pump (move knife switch to the "OFF" position).

	Valve Number	Valve Position	Valve Description	Verified By
Step 2	DW 13	Close	Tank Vent	
Step 3	DW 22	Close	Pump Suction	
Step 4	DW 15	Close	Pump Discharge	
Step 5	DW 17	Open	Pump Bypass	
Step 6	DW 19	Open	Tank Bypass	
Step 7	DW 9	Close	Upper Sightglass Isolation	
Step 8	DW 10	Close	Upper Sightglass Isolation	
Step 9	DW 11	Close	Lower Sightglass Isolation	
Step 10	DW 12	Close	Lower Sightglass Isolation	
Step 11	DW 2	Open	DBAB Supply Isolation	

ATTACHMENT 4: EMERGENCY CONTROL CENTER LAYOUT MAP



	NRC		Company	
1	Site Team Leader/DSO	321-8278	A	Emergency Director
2	Reactor Safety Coordinator	321-8281	B	Dose Assessment Coordinator
3	Government Liaison Coordinator	249-2419	C	Emergency Offsite Manager
4	Protective Measures Counterpart Link Communicator	(700) 371-0010 321-8288	D	State/County Representative
			E	NRC Liaison
5	Protective Measures Coordinator	321-8279		
6	Emergency Response Assistant	321-7466		
7	Management Counterpart Link	(700) 371-0008		
8	Environmental Dose Assmt Coord *			
9	Dose Assesor *			
10	Dose Assesor Communicator *			
11	HPN Communicator	(700) 371-5357		

* Telephone lines are installed, numbers are assigned on an as needed basis. All telephone numbers are in area code (419) unless otherwise specified. Telephones for positions 3, 4, 5, & 7 are located in the bottom drawer of the ECC storage cabinet.

COMMITMENTS

Section	Reference	Comments
Entire Procedure	TERMS Q 03111	Onsite organization responsibilities
Entire Procedure	TERMS Q 03112	Services and equipment to support the Emergency Response Organization

END

Davis-Besse Nuclear Power Station

EMERGENY PLAN IMPLEMENTING PROCEDURE

RA-EP-02310

TECHNICAL SUPPORT CENTER ACTIVATION AND RESPONSE

REVISION 1

Prepared by: _____ 3/1/01 Date

Sponsor: _____ Manager - Regulatory Affairs 4-4-01 Date

Approved by: _____ Director – Support Services 4/18/01 Date

Approved by: _____ Plant Manager 4/18/01 Date

DOCUMENTATION MANAGEMENT
CONTROL COPY
NO. 165

Effective Date: 5/7/01

Procedure Classification:

X Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:

STEP-BY-STEP

LIST OF EFFECTIVE PAGES

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TABLE OF CONTENTS

1.0 PURPOSE

This procedure outlines the steps required for activation, operations, and deactivation of the Technical Support Center (TSC).

2.0 REFERENCES

2.1 Developmental

2.1.1 DBNPS Emergency Plan

2.2 Implementation

2.1.1 RA-EP-02010, Emergency Management

2.1.2 RA-EP-02320, Emergency Technical Assessment

2.1.3 RA-EP-02510, Emergency Security Organization Activation and Response

2.1.4 RA-EP-02610, Emergency Radiation Protection Organization Activation and Response

2.1.5 RA-EP-02720, Recovery Organization

2.1.6 Emergency Plan Telephone Directory

3.0 DEFINITIONS

3.1 CLOSED CIRCUIT TELEVISION (CCTV) – A pre-established connection that when a video camera is attached to the cable in the Control Room, and a monitor is attached in the TSC, Control Room activities can be observed from the TSC.

3.2 COMPUTERIZED AUTOMATED NOTIFICATION SYSTEM (CANS) – A computer assisted system that has the following capabilities:

3.2.1 Contacting personnel through the use of pagers or the telephone system.

3.2.2 Accepting calls from authorized emergency responders.

3.2.3 Maintaining an updated list of Emergency Responders that have or have not responded.

3.3 DATA ACQUISITION AND DISPLAY SYSTEM (DADS) – A computer system that acquires and displays plant data. This system provides data to the Safety Parameter Display System (SPDS), Operator Aids, Emergency Response Data System (ERDS) and the Nuclear Data System (NDS).

3.4 EMERGENCY RESPONSE DATA SYSTEM (ERDS) – A system that is turned on during the activation of the TECHNICAL SUPPORT CENTER (TSC) that electronically transmits 54 plant parameters to the Nuclear Regulatory Commission Emergency Operating Center. This data may then be retransmitted to other agencies and the State of Ohio.

3.5 ENGINEERING TEAM - A team of engineers and/or technicians selected from the appropriate work groups and disciplines to evaluated specific accident conditions and propose solutions.

3.6 OWNER-CONTROLLED AREA (OCA) – The area contiguous with the PROTECTED AREA, designated by the owner organization to be patrolled for security purposes.

3.7 PROTECTED AREA (PA) – An area within the OWNER-CONTROLLED AREA encompassed by physical barriers, and to which access is controlled for security purposes.

3.8 TECHNICAL SUPPORT CENTER (TSC) – An area within the OWNER-CONTROLLED AREA, which has the capability to display and transmit plant status information to individuals who are knowledgeable of, and responsible for engineering and management support of reactor operations in the event of an emergency situation.

4.0 RESPONSIBILITIES

4.1 The TSC Engineering Manager shall be responsible for:

4.1.1 Implementation of this procedure.

4.1.2 Appointing a Lead for the Operations and Engineering support groups as required.

4.1.3 Coordinate TSC Engineering activities.

4.1.4 Calling out emergency response organization staff as specified in the Emergency Plan Telephone Directory upon a failure of the Computerized Automated Notification System (CANS).

4.2 The TSC Engineering Lead is responsible for:

4.2.1 Assisting the TSC Engineering Manager.

4.2.2 Coordination of the TSC Engineering group activities.

4.2.3 Activation of the Emergency Response Data System (ERDS).

4.2.4 Setup of CCTV when requested.

4.2.5 Calling in additional staff as required.

4.3 The TSC Operations Lead is responsible for:

4.3.1 Assisting the TSC Engineering Manager.

4.3.2 Coordinating the activities of the TSC Operations group activities.

4.3.3 Ensuring that the TSC extension of the Technical Data Loop is manned.

4.3.4 Calling in additional staff as required.

4.4 The Recovery Advisor is responsible for:

4.4.1 Assisting the Emergency Plant Manager as directed.

4.4.2 Collecting plant and equipment status in preparation for entering the recovery phase.

4.5 The Emergency RP Manager responsibilities are described in RA-EP-02610, Emergency Radiation Protection Organization Activation and Response.

4.6 The Emergency Security Manager responsibilities are described in RA-EP-02510, Emergency Security Organization Activation and Response.

4.7 The Emergency Plant Manager responsibilities are described in RA-EP-02010, Emergency Management.

5.0 INITIATING CONDITIONS

5.1 Any of the following emergency conditions have been declared:

5.1.1 Alert

5.1.2 Site Area Emergency

5.1.3 General Emergency

5.2 As determined by the Emergency Director.

6.0 PROCEDURE

NOTE 6.1

The TSC should be activated prior to the Emergency Director responsibilities being transferred to the TSC/ECC emergency response facilities.

6.1 Activation

6.1.1 The TSC Engineering Manager shall:

a. Ensure personnel are present in the TSC who are capable of performing the following functions:

1. TSC Engineering Manager
2. One – TSC Operations or Severe Accident Management (SAM) Engineer
3. One – TSC Engineer (Mechanical, Electrical or I&C)
4. Core/Thermal Hydraulic Engineer
5. Emergency RP Manager

b. On failure of the Computerized Automated Notification System (CANS) call out emergency response organization staff as specified in the Emergency Plan Telephone Directory.

c. Appoint a lead for the Operations and/or the Engineering groups if appropriate for the situation.

NOTE 6.1.1.d

The ERDS System should be placed in service within one hour of declaration of an Alert, Site Area Emergency or General Emergency.

d. Verify that the following equipment is energized and made ready for use:

   1. Emergency Response Data System (ERDS).

   2. Data Acquisition and Display System (DADS).

e. Verify that the TSC has established communications with the Control Room, Operations Support Center and the Emergency Control Center. The Technical Data Loop is the preferred method.

f. Direct that available information is placed on the TSC status boards.

g. Direct that a formal log be initiated for the TSC. Normally this log is maintained by the TSC Administrative Assistant.

h. Brief the staff that is present and advise them that you are preparing to activate the TSC.

i. Using the Emergency Response Facility (ERF) Public Address System on the Emergency Plant Manager's desk, make the following announcement twice:

   "THE TECHNICAL SUPPORT CENTER IS ACTIVATED AT (time) **AND** (TSC Engineering Manager's Name) **IS THE TSC ENGINEERING MANAGER.**

6.1.2 The TSC Engineering Manager, or if manned, the TSC Engineering Lead shall:

a. Energize or make ready the following equipment in the TSC:

1. Activate Emergency Response Data System (ERDS) utilizing Attachment 1, ERDS Activation, within one hour of event classification. If the ERDS system fails, notify the NRC Liaison in the Emergency Control Center and begin sending the data every 15 minutes to the NRC by facsimile machine.

2. Energize the Data Acquisition and Display System (DADS) terminals.

3. Energize the electronic white boards.

4. Other TSC equipment as required.

b. Assign personnel to operate/monitor the Data Acquisition and Display System (DADS) terminals as needed.

c. Communicate activation status to the TSC Engineering Manager.

d. With concurrence of the TSC Engineering Manager callout additional engineering staff as required by the situation.

6.1.3 The TSC Engineering Manager, or if manned, the TSC Operations Lead shall:

a. Assign an individual to man the Technical Data Loop telephone at the TSC Operations Engineering work area.

b. Assign personnel to operate/monitor the Data Acquisition and Display System (DADS) terminals as need.

c. Communicate activation status to the TSC Engineering Manager.

d. With concurrence of the TSC Engineering Manager callout additional engineering staff as required by the situation.

6.1.4 The Recovery Advisor shall:

a. Assist the TSC Manager as directed with the activation of the TSC.

6.2 Operation

6.2.1 The TSC Engineering Manager shall:

a. Establish TSC objectives that are consistent and supportive of the event priorities established by the Emergency Director.

b. Coordinate the development of engineering teams to evaluate event issues.

c. Ensure adequate engineering support is available to perform engineering assessments.

d. Coordinate additional staff callout with the Emergency Offsite Manager (EOM) and the Emergency Security Manager.

e. Ensure RA-EP-02320, Emergency Technical Assessment is implemented as applicable.

f. Ensure key TSC objectives and activities are tracked on the Problem Analysis Status Board.

g. Periodically review TSC status boards for accuracy.

h. Coordinate periodic TSC briefings with the Emergency Plant Manager. These briefing should include at a minimum, emergency classification and prognosis, potential problems, developments, required actions, review of the Problem Analysis Status Board entries and establishment TSC priorities. Briefs should occur approximately ever 60 minutes or after a significant change in event conditions. Each briefing should be summarized in the TSC formal log.

i. Activate an alternate TSC when notified that continued DBAB operation may be threatened. The selected alternate location should have access to data, adequate telephones and reference material.

j. Ensure detail records of TSC activities are maintained.

6.2.2 The TSC Engineering Manager, or if manned, the TSC Operations Lead shall:

a. Coordinate the assessment activities of the technical staff.

b. Assign activities to that team and/or team member most capable of analyzing the particular problem.

c. Perform TSC assessment activities in accordance with RA-EP-02320, Emergency Technical Assessment.

d. Ensure assigned status boards and logs are accurately maintained.

e. Make periodic status reports to the TSC Engineering Manager.

f. Immediately advise the Dose Assessment Coordinator of any change or potential change in:

1. Radiological release path(s)

2. Release rate(s)

3. Source term

4. Release duration

g. When directed, setup the Closed Circuit Television (CCTV) System between the Control Room and the TSC as per Attachment 2, Closed Circuit Television (CCTV) Operation.

6.3 Deactivation

6.3.1 The TSC Engineering Manager shall ensure the following is performed when directed by the Emergency Director to deactivate the TSC:

a. Implement RA-EP-02720, Recovery Organization

1. Complete the Deactivation Report as per RA-EP-02720.

2. Complete applicable sections of the Recovery Worksheet.

3. Review those sections of RA-EP-02720, Recovery Organization, that are applicable to the Engineering Coordinator in preparation for turnover of ongoing TSC issues.

b. Ensure that all ongoing TSC issues are turned over to the appropriate party.

c. Ensure all parties notified by the TSC during the event are advised that the TSC is deactivating.

d. Coordinate the review and collection of TSC logs and records. Completed records will be forwarded to the Emergency Preparedness Unit.

e. Ensure that all TSC equipment and unused supplies have been returned to the normal standby configuration and/or location.

7.0 FINAL CONDITIONS

This procedure shall be deactivated when:

7.1 The indicated plant conditions are such that the emergency has been downgraded to an Unusual Event or terminated:

7.1.1 AND the TSC has been deactivated,

7.1.2 AND TSC personnel relieved of all duties,

7.1.3 AND organizations that were notified by the TSC during the event are advised that the TSC is deactivated.

7.2 The Deactivation Report has been completed as per RA-EP-02720, Recovery Organization.

7.3 All records generated during the operations of the TSC have collected and forwarded to the Emergency Preparedness Unit.

7.4 All equipment and unused supplies have been returned to the normal standby configuration and/or location.

8.0 RECORDS

8.1 The following quality assurance records are completed by this procedure and shall be listed on the Nuclear Records List, captured and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.1.1 None

8.2 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management in accordance with NG-NA-00106:

8.2.1 None

Attachment 1
EMERGENCY RESPONSE DATA SYSTEM (ERDS) ACTIVATION

Overview

The DADS system will continuously send 54 points of plant data to the NRC when the ERDS system is activated. This data is hard copied every 15 minutes in the DADS computer room and may be faxed to the NRC if the computer link fails.

> NOTE
>
> If this system fails, immediately advise the Emergency Control Center (ECC) NRC Liaison.

Activation

To send data to the NRC from one of the VT220 terminals in the TSC perform the following:

1. Turn the terminal Power Switch "ON".
2. Press "Return".
3. At the "Local>" prompt, enter "C" and then press "Return".
4. At the "Username" prompt, enter "ERDS" and then press "Return".
5. At the "Password" prompt, enter "ERDS" and then press "Return".
6. Enter "1" and then press "Return"

Deactivation

To log off the system, follow the computer instructions.

Attachment 2
CLOSED CIRCUIT TELEVISION (CCTV) OPERATION

Overview

The Closed Circuit Television (CCTV) is a pre-established cable between the Control Room and the TSC that allows a television and VCR to be attached in the TSC and a standard video camera to be setup in the Control Room. The CCTV can be used to record and monitor special evolutions that are taking place in the Control Room.

Setup

1) Obtain the following items:

   a) TSC components:

      i) Television (TV)

      ii) Video Cassette Recorder (VCR) equipped with a single male pin connector.

      iii) Blank VCR

   b) Control Room components:

      i) Standard VHS video camera.

2) CCTV setup:

   a) TSC setup:

      i) Located along the east wall of the TSC protruding out of the floor near the TSC fax machine, are the cable marked for the CCTV circuit. Plug in the audio and video cable to the input jack on the VCR.

   b) Control Room setup:

      i) Locate the audio and visual CCTV circuits along the south wall of the Control Room near the Assistant Shift Supervisor's desk.

      ii) Connect the audio and visual connections to the camera and adjust the camera to send the required signal.

   c) Establish communication as necessary with the Control Room camera operator.

COMMITMENTS

Section	Reference	Comments
Entire Procedure	Q 00650	Provide a TSC
Entire Procedure	Q 03111 Q 02850	Positions descriptions and responsibilities
6.1.2.b.1	O 016075 O 016073 O 016249 O 015931	Emergency Response Data System (ERDS)

END