June 1, 1982 Document #5074A

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| Number | Title |
|---------------------|---------------------------------------|
| | The Corporate Command |
| (Pey 9, Aug. 1981) | Center Director |
| (Rev. 5, Aug. 2002) | |
| CC-1A | Corporate Command Center |
| (Rev.0, June 1980) | Director - Hazardous Material Release |
| | The Corporate Command Center |
| (Der 2 Tap 1981) | Intelligence Director |
| (Rev. 5, 5an. 1961) | |
| CC-3 | The Medical Director |
| (Rev.2, Jan. 1981) | |
| cc_4 | Information Director |
| (Rev. 2, Dec. 1980) | |
| (| |
| CC-5 | The ERP Director |
| (Rev.0, Dec. 1980) | |
| CC-6 | The Manpower and Logistics Director |
| (Rev.2, Dec. 1980) | |
| | The Compunications Director |
| CC-7 | The Communicacions Director |
| (Rev.3, Jan. 1981) | |
| CC-8 | The Health Physics Director |
| (Rev.0, Jan. 1981) | |
| | The Accounting Director |
| CC-9 | The Accounting Director |
| (Rev.2, Jan. 1981) | |
| cc-10 | The Legal Consultant |
| (Rev.2, Jan. 1981) | |

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|-----------------------------|--|--|--|--|--|--|--|
| | The Engineering Director | | | | | | |
| (Rev.2, Nov. 1980) | | | | | | | |
| CC-12 | The System Power Dispatcher | | | | | | |
| (Rev.6, Jan. 1981) | | | | | | | |
| CC-13 (Rev.0, Jan. 1981) | The Exercise and Drill Program | | | | | | |
| CC-14 (Rev.0, Jan. 1981) | Offsite Communications Capabilities | | | | | | |
| CC-15 (Rev.0, Jan. 1981) | The Division Director | | | | | | |
| CC-16 (Rev.0, June 1982) | The Environmental Director | | | | | | |
| EOF-1 (Rev.2, Aug. 1981) | The Recovery Manager | | | | | | |
| EOF-2 (Rev.l, Dec. 1980) | The Technical Support Manager | | | | | | |
| EOF-3 (Rev.3, June 1982) | The Environmental/Emergency Coordinator | | | | | | |
| EOF-4 (Rev.l, Dec. 1980) | The Emergency News Center Director | | | | | | |
| EOF-5 (Rev.l, Dec. 1980) | The Design and Construction Support Manager | | | | | | |
| EOF-6 (Rev.l, Dec. 1980) | The Administration and Logistics Manager | | | | | | |
| EOF-7 (Rev.l, Dec. 1980) | The Scheduling/Planning Manager | | | | | | |
| EOF-8 (Rev.2, Dec. 1980) | The Waste Systems Radiation Control Manager | | | | | | |
| EOF-9 (Rev.0, Feb. 1981) | Recovery Operations | | | | | | |
| EOF-10 | The Advisory Support Director | | | | | | |
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EOF-11 (Rev.0, Jan. 1981)

EOF-12 (Rev.1, Oct. 1981)

EOF-13 (Rev.0, Nov. 1981)

EOF-14 (Rev.0, Dec. 1981)

Training Director

Access Control to the Emergency Operations Facility and Corporate Command Center.

Title

Activation of the Westinghouse Nuclear Training Center as Nearsite EOF for Zion Station.

Activation of the General Electric Nuclear Training Center as Nearsite EOF for Dresden Station.

CC-16 June 1982 Revision 0

Corporate Command Center

Emergency Plan Implementing Procedure

EPIP: CC-16

TITLE: THE ENVIRONMENTAL DIRECTOR

| prepared by: J. a. Sitewski | Date: 6-23-82 |
|-----------------------------|---------------|
| Reviewed by: Q.E. Payoushi | Date: 6-23-82 |
| Approved by: RA Hassin | Date: 6.23.82 |



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THE CCC ENVIRONMENTAL DIRECTOR

A. PURPOSE

The purpose of this procedure is to assist the Environmental Director in fulfilling the functions assigned to him in the GSEP.

B. REFERENCE

- The Generating Stations Emergency Plan and Telephone Directory.
- Emergency Plan Implementing Procedures of the Offsite GSEP Organization (CCC and EOF series EPIP's).

C. PREREQUISITES

- 1. Training sufficient to perform the duties.
- D. PRECAUTIONS

None

- E. LIMITATIONS AND ACTIONS
 - A working knowledge of the Environmental Director (ED series) procedures and the Environs Group (EG series) procedures. Actions should be taken in accordance with the guidance set forth in the procedures.
- F. PROCEDURE
 - Responsibility The Environmental Director is responsible for: (1) directing all Commonwealth related environmental sampling activities; (2) interfacing with the State of Illinois with regard to radiological matters; and (3) advising the Corporate Command Center Director on hazardous materials, including radioactivity, affecting plant personnel and the public.
 - 2. Duties -
 - Direct the environmental sampling activities of the Environs Director.
 - b. Coordinate the environmental contractor's assistance in the collection of environmental data.
 - c. Cooperate with the Illinois Department of Nuclear Safety, in the implementation of an offsite dose assessment program.

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F. PROCEDURE (Continued...)

1.000 1000

- d. After activation of the EOF, or CCC and when the Environs Teams have been dispatched, update the appropriate State and Federal authorities at 15-minute intervals or as soon as possible when field conditions are reported to have changed significantly.
 - Direct the information to be relayed to a staff communicator whose primary duty is to update the State and Federal agencies.
 - Provide a phone which can be used primarily by the communicator to update the State and Federal agencies.
- e. Based on environmental sampling or known plant release, calculate projected dose values for affected areas; based on these projections, advise the CCC Director of protective action recommendations for plant personnel and members of the public. These recommendations should be consistent with Tables 6.3-1, 6.3-2 and 6.3-3 of this plan.
- f. Maintain a record of the GSEP related activities.
- g. Obtain information and perform activities at the Corporate Environmental Center at the direction of the Environmental/Emergency Coordinator.

G. CHECKLISTS

- Attachment A GSEP Guidelines for Recommended Offsite Protective Actions for Gaseous Plume Exposure (Table 6.3.1 of the GSEP).
- Attachment B GSEP Guidelines for Protection Against Ingestion of Contamination for the Offsite Public (Table 6.3.2 of the GSEP).
- Attachment C Summary of Possible Offsite Protective Actions to be Recommended or Implemented during and Emergency (Table 6.3.3 of the GSEP).

H. TECHNICAL SPECIFICATION REFERENCES

None

SUGGESTED VISION TO GSEP T



Recommended Protective Actions For Gaseous Release

| Accident Classification | Release Situation (MARS Form Section 6) | | Pr in Who | zonal zonal ble Bo | ted Don Areas | ses (Rem s X, Y. T | • 2. hyrol | ۹. | Containment Radiation Level (R/Hr) When no Projected Doses are Available | Recommended Protective Actions (S-Shelter, E-Evacuation, P - Prepare for Possible action, 1.0 info only) X Y I | S | ection 8 |
|--|--|--------|-----------------|--------------------------|------------------|--------------------------|---------------|-----------|--|--|---------|------------|
| | | | × | 1 | | | | - | | | | |
| | A h - Ho Balance | (1) | 0 | 0 | 0 | 0 | 0 | 0 | NORMAL CONTAINMENT RAD. | 1.0. | (1) | |
| 1. Unusual svent | 6.B or E - Potential | (2) <1 | 0.5 | M | M | < 2.5 | M | M | < 200 | | 14/ | 0.0 |
| | or Stopped 6.C or D - Imminent or Occurr | (3) < | 0.5 | * | H | <2.5 | • | * | < 200 | 1.0. | (3) | 8.A |
| | | | | | | 0 | 0 | 0 | NORMAL CONTAINMENT RAD. | 1.0. | w | 0.1 |
| 2. Alert 6.A - No Release 6.B or E - Potent or Sto 6.C or D - 1mine | 6.A - No Release 6.B or E - Potential | (2) 4 | 0.5 | M | M | 22.5 | M | M | <200 | 1.0. | (2) | 8.4 |
| | or Stopped | | | | | 15.0 | 42.5 | | 200 - 400 | (P) P) P) | (3) | 8.8 |
| | 6.C or D - Imminent | (4) | Anal | lysis ! | tot Comp | lete | | ∠ 200 | 1.0. | (4) | 8.4 . 3 | |
| | or Occurring | (5) | | Anal | ysis I | Not Comp | lete | | 200 - 400 | (P) P) P) | (5) | 8.8 |
| | | (6) 2 | 1.0 | ¢0.5 | | <5.0 | 2.5 | | | (P) P) P) | (6) | 0.0 F |
| | | | | | | 0 | 0 | | NORMAL CONTAINMENT RAD. | (P) P) P) | _ 111 | 1.0 3 |
| 3. Site Emergent | 6.8 or 8 - Potential | (2) | A | 11 Do | - | A | 11 Do | se ion | < 2000 | (P) P) P) | (2) | · |
| | 6.C or D - Imminent | (3) | | Ana | lysis | Not Comp | lete | | <400 | (P) P) P) | (3) | *.* 2 |
| | or Occurrin | (4) | | Ana | lysis | Not Comp | lete | | 400 - 2000 | (S) P) P) | (4) | 8.CLD |
| | | (5) | £1.0 | <0. | 5 M | 25.0 | < 2.5 | 5 1 | | (P) P) P) | (5) | 8.8 |
| | | (6) | >1.0 | <1. | | >5.0 | <5.0 | , | | (E*) S*) P) | (6) | 8.C.H&B |
| | | (7) | 71.0 | >1. | .0<1.0 | >5.0 | >5.0 | 0<5 | .0 | (E*) E*) S) | (7) | 8.C.8,1,67 |

 Poot Notes:
 The symbol ()) represents the entire 0-2 mile area, and the 2-5 and 5-10 mile three downwind sectors.
 The symbol ()) represents the entire 0-2 mile area, and the 2-5 and 5-10 mile three downwind sectors.
 The symbol ()) represents the entire 0-2 mile area, and the 2-5 and 5-10 mile three downwind sectors.

 R- Range (Miles)
 SB-Site Boundary

 N- Minimal
 N

- Evacuation, when noted, is the recommended protective action only when weather conditions permit and an evacuation time analysis confirms it as the preferred choice, otherwise sheltering is the protective action to recommend. If evacuation is recommended for zonal areas Y and Z and if Zonal areas Y and Z and if Zonal areas Y and Z are in Wisconsin or Iowa, then the recommendation for evacuation should extend only to the range at which the projected dose is 1 Rem WB or 5 Rem thyroid, whichever is the greater range. Sheltering is the protective action from this range out to 5 miles if the "range" is in Zone Y and out to 10 miles if it is in Zone Z..
- Projected actual doses are based on the actual or most likely release point and the existing site meteorological conditions. The zones X,Y, and Z are: Y- SR Z R < 2 Miles: Y- 2 Z R < 5 Miles: Z- 5 Z R < 10 Miles.</p>

EVISION TO SUGGESTED 6.3-1 GSEP 1



Recommended Protective Actions For Gaseous Release

| Accident Classification | Release Bituation (MARS Form Section 6) | Actual Projected Dom in Zonal Areas Whole Body X Y S | es (Rem)** X, Y, 5 I. Thyroid X Y I | Containment Radiation Level (R/Hr) When no Projected Doses are Available | Recommended Protective Actions (S-Shelter, B-Evacuation, P - Prepare for Possible action, I.O info only) X T E | Sec | tS Form stion 8 |
|---|---|---|---|--|--|--|--|
| 4. General Emergency | 6.A - No Release (1) 6.B or E - Potential or Stopped (2) 6.C or D - Imminent (3) or occurring (4) (5) (6) | NOT APPLICABLE All Dose Situations Analysis not co 41.0 < 0.5 1.0 < 1.0 1.0 > 1.0 < 1.0 1.0 > 1.0 > 1.0 | TO GENERAL EMERG All Dose Situations mplete <5.0 < 2.5 >5.0 < 5.0 >5.0 > 5.0 < 5.0 >5.0 > 5.0 > 5.0 > 5.0 | 20 >0 >0 | (5) 5) P) (E*) 5) P) (5) 5) P) (E*) 5) P) (E*) E*) 5) (E*) E*) 5) | (2) (3) (4) (5) (6) (7) | 8.C,D & B 8.C,H & B 8.C,D & B 8.C,R & B 8.C,R,I&P 8.C,R,I & J |
| Foot Notes: The symbol R- Range (Miles SB-Site Boundar H- Minimel | ())) represents the ent a) cy | ire 0-2 mile area | , and the 2-5 and | 5-10 mile three downwind sector | x. | | |

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- Evacuation, when noted, is the recommended protective action only when weather conditions permit and an evacuation time analysis confirms it as the preferred choice, otherwise sheltering is the protective action to recommend. If evacuation is recommended for sonal areas I and I sonal areas D I and I are in Wisconsin or Iows, then the recommendation for evacuation should extend only to the range at which the projected dose is 1 Rem WB or 5 ٠ Rem thyroid, whichever is the greater range. Sheltering is the protective action from this range out to 5 miles if the "range" is in Sone I and out to 10 miles if it is in Some 5 ...
- ** Projected actual doses are based on the actual or most likely release point and the existing site meteorological conditions. The sones X,Y, and X are: I- SB & R < 2 Miles: I- 2 & R < 5 Miles: 3- 5 & R 2 10 Miles.



TABLE 6.3-2 GSEP GUIDELINES FOR PROTECTION AGAINST INGESTION OF CONTAMINATION FOR THE OFFSITE PUBLIC

FOOD AND WATER CONTAMINATION

A. Derived Response Levels

| Nuclide## | Critical Organ | Milk/Water*** | Preventive Action Levels* Total Intake via All Food and Water Pathways | Pasture Grass (Fresh weight) | |
|-----------|----------------|---------------|--|---------------------------------|--|
| I-131 | Thyroid | 0.012 uC1/1 | 0.09 uC1 | 0.27 uC1/kg | |
| Cs-137 | Whole Body | 0.34 uC1/1 | 7 uC1 | 3.5 uC1/kg | |
| Sr-90 | Bone | 0.007 uC1/1 | 0.2 uC1 | 0.7 uC1/kg | |
| Sr-89 | Bone | 0.13 uC1/1 | 2.6 uC1 | 13 uC1/kg | |

*The preventive derived response action levels relate to a 1.5 rem projected dose commitment to the thyroid or to a 0.5 rem projected dose commitment to the whole body, bone, or any other organ. <u>Emergency action</u> <u>levels</u> are equal to ten (10) times the preventive levels and relate to either a 15 rem projected dose commitment to the thyroid or a 5 rem projected dose commitment to the whole body, bone, or any other organ. #If other nuclides are present, use Regulatory Guide 1.109 to calculate the dose commitment to the critical organ(s). Infants are considered to be the critical segment of the population.

B. Recommended Protective Actions

Preventive Level Exceeded

- For pasture; remove lactating dairy cows from contaminated pasturage and substitute uncontaminated stored feed. Also, a substitute source of uncontaminated water.
- For milk; withhold milk from market to allow radioactive decay. Consider diversion of fluid milk for production of butter or evaporated milk.
- For fruits and vegetables; wash, brush, or scrub to remove contamination. Allow radioactive decay through canning, dehydration, or storage.
- · For grains; mill and polish.

Emergency Level Exceeded

 Isolate food containing radioactive contamination to prevent its introduction into commerce and determine whether condemnation or another disposition is appropriate. Before taking this action, consider:

---Availability of other possible actions; --Importance of particular foods in

nutrition; and

-- Time and effort required to take action.

***The preventive action levels apply to water as well as milk; the protective action for water would be to use a suitable source of uncontaminated water. ATTACHMENT

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TABLE 6.3-3 SUMMARY OF POSSIBLE OFFSITE PROTECTIVE ACTIONS TO BE RECOMMENDED OR IMPLEMENTED DURING AN EMERGENCY

| ACCIDENT PHASE | EXPOSURE PATHWAY | EXAMPLES OF ACTION TO BE RECOMMENDED | | | | | |
|--|--|---|--|--|--|--|--|
| 1 EMERGENCY | Inhalation of gases, radiolodine, or particulate | Evacuation, shelter, access control, respiratory protection, prophylaxis (thyroid protection) | | | | | |
| (0.5 to 30 hours)* | Direct whole body exposure | Evacuation, shelter, access control | | | | | |
| (0.3 10 30 10018)- | Ingestion of milk | Take cows off pasture, prevent cows from drinking surface water, discard contaminated milk, or divert to stored products such as cheese | | | | | |
| 2INTERMEDIATE | Ingestion of fruits and vegetables | Wash all produce, or impound produce, delay harvest until approved, substitute uncontaminated produce | | | | | |
| PHASE | Ingestion of water | Cut off contaminated supplies, substitute from other sources filter, demineralize | | | | | |
| (30 hours to 30 days)* | Whole body exposure and inhalation | Relocation, decontamination, access control | | | | | |
| ³ LONG TERM PHASE (over 30 days)* | Ingestion of food and water contaminated from the soil either by resuspension or uptake through roots | Decontamination, condemnation, or destruction of food; deep plowing, condemnation, or alternate use of land | | | | | |
| | Whole body exposure from deposition material or inhalation of resuspended material | Relocation, access control, decontamination, fixing of contamination, deep plowing | | | | | |

Emergency phase - Time period of major release and subsequent plume exposure.

²Intermediate phase - Time period of moderate continuous releases with plume exposure and contamination of environment.

³Long Term Phase - Recovery period.

*"Typical" Post-accident time periods.

*Reference: USEPA "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," 1975. CC-16 June 1982 Revision 0 Page 7

GSEP CORPORATE COMMAND CENTER EMEGENCY PLAN IMPLEMENTING PROCEDURE

EPIP: EOF-3

Title: The Environmental/Emergency Coordinator

| Prepared by: & a. Siterski | Date: 6-23-82 |
|----------------------------|---------------|
| Reviewed by: 0,6 Downoho | Date: 6-23-82 |
| Approved by: R.A. Lesowa | Date: 6.2382 |
| Approved of | |

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ENVIRONMENTAL/EMERGENCY COORDINATOR

A. PURPOSE:

The purpose of this procedure is to assist the Environmental/Emergency Coordinator in fulfilling the responsibilities assigned in the GSEP.

- B. REFERENCES:
 - The Generating Stations' Emergency Plan and Telephone Directory.
 - The GSEP Environmental Director Emergency Plan Implementing Procedures.
 - 3. The Environs Group Procedures.
- C. PREREQUISITES:
 - The Environmental/Emergency Coordinator will designate an individual to fulfill the duties of Environmental Director at the CCC.
- D. PRECAUTIONS:

1. None.

- E. LIMITATIONS AND ACTIONS:
 - 1. None.
- F. PROCEDURE:
 - 1. Responsibilities -

The Environmental/Emergency Coordinator is responsible for coordinating and managing the activities associated with radiological consequence assessment, for operating the Emergency Control Center at the Nearsite EOF and for serving as the official contact with State and Federal radiological assessment personnel.

- 2. Duties
 - a. Direct a staff to include a communicator to the Corporate Command Center; a communicator to Illinois and Iowa or Wisconsin agencies; and a computer systems representative.
 - b. Establish communications with the Corporate Environmental Center, the Onsite TSC, and/or the Nearsite EOF Recovery Center and obtain information on the accident conditions, meteorological conditions, and estimates of radioactive material releases.

2. Duties - (Continued...)

f.

- C. Establish communications with offsite authorities, especially the Department of Nuclear Safety RAFT (located near the site) and REAC (Springfield) facilities, and relay information necessary for the respective authorities to implement their emergency plans.
- d. Coordinate the activities of the Environs Director (nearsite) and the Environmental Director at the CCC. Coordinate the activities of environmental contractors.
- e. Make sure the Environs Director has established communication with Illinois DNS Rapid Assistance Team (RAT) if a team was dispatched. Provide vehicle (and drivers with appropriate protective equipment and personnel dosimetry) if requested by DNS to support State field activities.
 - Interpret radiological data and periodically update the Onsite TSC, Recovery Center, and offsite authorities of real time measurements and projected radiological exposure. Update the appropriate state and Federal authorities at 15-minute intervals or as soon as possible when field conditions are reported to have changed significantly. These updates will be carried out by the Environmental Director in the CCC, after the activation of the EOF or CCC and when the Environs Teams have been dispatched.
 - Direct the information to be relayed to a staff communicator whose primary duty is to update the state and Federal agencies.
 - Provide a phone which can be used primarily by the communicator to update the state and Federal agencies.
 - g. Based upon calculated dose projections, make recommendations for protective actions offsite consistent with Checklists 1,2, and 3 of this procedure.
 - h. Establish a schedule of personnel assignments for all environmental and offsite health physics positions. If 24-hour shift coverage is required, refer to Attachement E which is a suggested shift manning schedule for four or five person rotation. Use of the schedule is optional.
 - Maintain a record of the GSEP related activities. Refer to Attacchment D.
- CHECKLISTS:

G.

- Attachment A GSEP Guidelines for Recommended Offsite Protective Actions for Gaseous Plume Exposure (Table 6.3-1 of the GSEP).
- Attachment B GSEP Guidelines for Protection Against Ingestion of Contamination for the Offsite Public (Table 6.3-2 of the GSEP).

CHECKLISTS: (Continued..)

- Attachment C Summary of Possible Offsite Protective Actions to be Recommended or Implemented During an Emergency (Table 6.3-3 of the GSEP).
- Attachment D Environmental/Emergency Coordinator's Checklist.
- 5. Attachment E Schedule for Recovery Group Shift Manning.
- 6. Attachment F Environmental Organization.

TECHNICAL SPECIFICATION REFERENCES:

1. None.

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Revision June 1982

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Recommended Protective Actions For Gaseous Release

| Accident Classification | Release Situation (MARS Form Section 6) | | P in Wh | zonal iole B | Actual ted Dos 1 Areas ody 2 | x, Y, | 6 Z. hyrole Y | d 1 | Containment Radiation Level (R/Hr) When no Projected Doses are Available | Recommended P (S-Shelter P - Prepa action, I X | , E- | ctive Actions Evacuation, for Possible - info only) E | Se | RS Form |
|-----------------------------|--|--------------|---------------|-----------------|--|--------------|---------------------|------------|--|--|-------------|---|-----|-----------|
| | | | | | | | | | NORMAL CONTAINMENT RAD. | 1. | 0. | | (1) | 8.A |
| 1. Unusual Event | 6.A - No Release | (1) | 0 5 | 0 | 0 | 12.5 | M | M | < 200 | 1. | 0. | | (2) | 8.A |
| | 6.C or D - Inminent or Occurr | (3) 4 1mg | <0.5 | M | M | 4 2.5 | | M | < 200 | 1. | 0. | | (3) | 8.4 |
| | 4. 1. No Balance | | | | | 0 | 0 | 0 | NORMAL CONTAINMENT RAD. | 1. | 0. | | (1) | 8.A |
| 2. Alert | 6.8 or E - Potential | (2) | 40.5 | M | M | 22.5 | M | M | <200 | 1. | 0. | | (2) | 8.A |
| or Str 6.C or D - Immine | or Stopped | (3) | <1.0 | <0.5 | | 25.0 | <2.5 | | 200 - 400 | (P) | P) | P) | (3) | 8.8 |
| | 6.C or D - Imminent | (4) | | Anal | ysis M | ot Comp | lete | | < 200 | • | .0. | | (4) | 8.4 |
| | or Occurrin | (5) | | Anal | ysis N | ot Comp | lete | | 200 - 400 | (P) | P) | P) | (5) | 8.8 |
| | | (6) | L 1.0 | ×0.5 | | <5.0 | 2.5 | M | | (P) | P) | P) | (6) | 8.8 |
| | - C. b Ho Balance | (1) | | 0 | 0 | 0 | 0 | 0 | NORMAL CONTAINMENT RAD. | (P) | P) | P) | (1) | 8.8 |
| 3. Site smergent | 6.8 or 8 - Potential or Stopped | (2) | A | 11 Do | ions_ | AS | 11 Do | se ions | < 2000 | (P) | P) | P) | (2) | 8.8 |
| | 6.C or D - Imminent | (3) | | Ana | lysis M | tot Comp | lete | | 2400 | (P) | P) | P) | (3) | 8.8 |
| | or Occurrin | 9 (4) | | Ana | lysis P | tot Comp | lete | | 400 - 2000 | (5) | P) | P) | (4) | 8.CLD |
| | | (5) | 41.0 | < 0. | 5 M | 25.0 | < 2.5 | | 이 일 같은 그 것같은. | (P) | :) | P) | (5) | 8.8 |
| | | (6) | >1.0 | • < 1. | | >5.0 | < 5.0 | | | (2*) | S*) | P) | (6) | 8.C,H&B |
| | | (7) | >1.0 | > >1. | 0<1.0 | >5.0 | > 5.0 | <5. | 0 | (2*) | E* |) 5) | (7) | 8.C,H,I,6 |

Foot Notes:

The symbol ())) represents the entire 0-2 mile area, and the 2-5 and 5-10 mile three downwind sectors.

R- Range (Miles)

SB-Site Boundary

M- Minimal

Bvacuation, when noted, is the recommended protective action only when weather conditions permit and an evacuation time analysis confirms it as the preferred choice, otherwise sheltering is the protective action to recommend. If evacuation is recommended for zonal areas Y and Z and if Zonal areas Y and Z are in Misconsin or Iowa, then the recommendation for evacuation should extend only to the range at which the projected dose is 1 Rem MB or 5 Rem thyroid, whichever is the greater range. Sheltering is the protective action from this range out to 5 miles if the "range" is in Zone Y and out to 10 miles if it is in Zone Z..

** Projected actual doses are based on the actual or most likely release point and the existing site meteorological conditions. The zones X,Y, and Z are:

| - | | | |
|---|--|---|--|
| 1 | | - | |
| | | | |

SUGGESTED REVISION TO 6.3-1 GSEP 1 2) 17



Recommended Protective Actions For Gaseous Release

| Accident classification | Release Situation (MARS Form Section 6) | Actual Projected Dosen in Zonal Areas Whole Body X Y Z | (Rem)** X, Y, & Z. Thyrold X Y Z | Containment Radiation Level (R/Hr) When no Projected Domes are Available | Recommended Protective Actions (S-Shelter, E-Svacuation, P - Prepare for Possible action, I.O infe only) X Y S | 3- | tion 8 |
|---|--|--|--|--|--|--|--|
| I. General Emergency | 6.A - No Release (1) 6.B or E - Potential or Stopped (2) 6.C or D - Imminent (3) or occurring (4) (5) (6) (7) | NOT APPLICABLE T All Dose <u>Situations</u> Analysis not comp <1.0 <0.5 M >1.0 <1.0 K >1.0 >1.0 <1.0 >1.0 >1.0 >1.0 | All Dome Situations Diete <5.0 <2.5 M >5.0 <5.0 M >5.0 >5.0 <5. >5.0 >5.0 >5.0 <5. | 2ENCT >0 >0 >0 | (S) S) P) (E*) S) P) (S) S) P) (E*) S) P) (E*) E*) S) (E*) E*) S) | (2) (3) (4) (5) (6) (7) | 8.C,D 6 8 8.C,H 6 8 8.C,D 6 8 8.C,H 6 8 8.C,H,16P 8.C,H,16P |
| Foot Wotes: The symbol N- Range (Mile SB-Site Bounda M- Minimel | ())) represents the ent a) ry | ire 0-2 mile area, | and the 2-5 and | d 5-10 mile three downwind secto | ors. | | |

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Evacuation, when noted, is the recommended protective action only when weather conditions permit and an evacuation time analysis confirms it as the preferred choice, otherwise sheltering is the protective action to recommend. If evacuation is recommended for zonal areas I and I and if Ional areas D I and I are in Misconzin or lows, then the recommendation for evacuation should extend only to the range at which the projected dose is 1 Rem MB or 5 Rem thyroid, whichever is the greater range. Sheltering is the protective action from this range out to 5 miles if the "range" is in Zone I and out

to 10 miles if it is in Zone 1 ..

** Projected actual doces are based on the actual or most likely release point and the existing site meteorological conditions. The zones X,Y, and I are: X- SB < R <2 Miles; T- 2 < R < 5 Miles; I- 5 < R < 10 Miles.





TABLE 6.3-2

GSEP GUIDELINES FOR PROTECTION AGAINST INGESTION OF CONTAMINATION FOR THE OFFSITE PUBLIC

FOOD AND WATER CONTAMINATION

Derived Response Levels ۸.

| Nuclide** | | | Preventive Action Levels* | |
|-----------------------------------|---------------------------------------|--|---|--|
| | Critical Organ | Milk/Water*** | Total Intake via All Food and Water Pathways | Pasture Grass (Fresh weight) |
| I-131 Cs-137 Sr-90 Sr-89 | Thyroid Whole Body Bone Bone | 0.012 uC1/1 0.34 uC1/1 0.007 uC1/1 0.13 uC1/1 | 0.09 uCi 7 uCi 0.2 uCi 2.6 uCi | 0.27 uC1/kg 3.5 uC1/kg 0.7 uC1/kg 13 uC1/kg |

*The preventive derived response action levels relate to a 1.5 rem projected dose commitment to the thyroid or to a 0.5 rem projected dose commitment to the whole body, bone, or any other organ. Emergency action levels are equal to ten (10) times the preventive levels and relate to either a 15 rem projected dose commitment to the thyroid or a 5 rem projected dose commitment to the whole body, bone, or any other organ. ** If other nuclides are present, use Regulatory Guide 1.109 to calculate the dose commitment to the critical organ(s). Infants are considered to be the critical segment of the population.

Recommended Protective Actions

Preventive Level Exceeded

- · For pasture; remove lactating dairy cows from contaminated pasturage and substitute uncontaminated stored feed. Also, a substitute source of uncontaminated water.
- · For milk; withhold milk from market to allow radioactive decay. Consider diversion of fluid milk for production of butter or evaporated milk.
- · For fruits and vegetables; wash, brush, or scrub to remove contamination. Allow radioactive decay through canning, dehydration, or storage.
- · For grains; mill and polish.

Emergency Level Exceeded

- Isolate food containing radioactive contamination to prevent its introduction into commerce and determine whether condemnation or another disposition is appropriate. Before taking this action, consider:
 - -- Availability of other possible actions; -- Importance of particular foods in nutrition; and
 - -- Time and effort required to take action.

***The preventive action levels apply to water as well as milk; the protective action for water would be to use a suitable source of uncontaminated water.

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TABLE 6.3-3 SUMMARY OF POSSIBLE OFFSITE PROTECTIVE ACTIONS TO BE RECOMMENDED OR IMPLEMENTED DURING AN EMERGENCY

| ACCIDENT PHASE | EXPOSURE PATHWAY | EXAMPLES OF ACTION TO BE RECOMMENDED |
|--|--|---|
| 1 EMERGENCY PHASE | Inhalation of gases, radioiodine, or particulate | Evacuation, shelter, access control, respiratory protection, prophylaxis (thyroid protection) |
| | Direct whole body exposure | Evacuation, shelter, access control |
| ² INTERMEDIATE PHASE (30 hours to 30 days)* | Ingestion of milk | Take cows off pasture, prevent cows from drinking surface water, discard contaminated milk, or divert to stored products such as cheese |
| | Ingestion of fruits and vegetables | Wash all produce, or impound produce, delay harvest until approved, substitute uncontaminated produce |
| | Ingestion of water | Cut off contaminated supplies, substitute from other sources, filter, demineralize |
| | Whole body exposure and inhalation | Relocation, decontamination, access control |
| ³ LONG TERM PHASE (over 30 days)* | Ingestion of food and water contaminated from the soil either by resuspension or uptake through roots | Decontamination, condemnation, or destruction of food; deep plowing, condemnation, or alternate use of land |
| | Whole body exposure from deposition material or inhalation of resuspended material | Relocation, access control, decontamination, fixing of contamination, deep plowing |

Emergency phase - Time period of major release and subsequent plume exposure.

²Intermediate phase - Time period of moderate continuous releases with plume exposure and contamination of environment.

³Long Term Phase - Recovery period.

*"Typical" Post-accident time periods.

*Reference: USEPA "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," 1975.

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ATTACHMENT D

Environmental/Emergency Coordinator's Checklist

This checklist is for the convenience of the Environmental/Emergency Coordinator. It is not necessary to adhere to the checklist item-by-item. It may serve as an aid for recording information during the recovery operation.

> Reported to Recovery Manager and assumed control of the Emergency Control Center at Nearsite EOF at:

| Date: | a standard and a standard and a standard |
|-------|--|
| Time: | |

 Established communication with the CCC Environmental Director at:

| Date: | |
|-------|--|
| Time: | |

3. Established communication with the Environs Director at:

| Date: | and the second second second |
|-------|------------------------------|
| Time: | |

Established communications with offsite authorities at:

Agency Name

Date/Name Contacted

| RAFT | |
|------|--|
| REAC | |
| DOE | |
| | |

5. General notes on Recovery Activities:



10.00

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Figure 1

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