

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-324

REV. NO. 0

EMERGENCY ON-SITE RADIATION SURVEY TEAMS

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

J. L. L...
QC REVIEW

J. M...
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 20 PAGES

EMERGENCYON-SITERADIATION SURVEY TEAMS1.0 PURPOSE:

- 1.1 The prime objective of the Emergency On-Site Radiation Survey Teams is to rapidly survey areas immediately surrounding the restricted area in order to determine the extent and magnitude of any uncontrolled release of radioactive materials following an incident. It should be stressed that the initial on-site survey is of great importance. Decisions regarding the extent and types of protective actions required will be based upon data reported by the survey teams.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-i.7B Determination of Iodine or Particulate

3.0 INSTRUCTIONS:

- 3.1 Obtain appropriate On-Site Survey Team footlocker as directed by Tag Board Assignment. If seal is broken, use equipment list inside footlocker to inventory equipment. Request the assistance of the Survey Center Manager in obtaining replacement equipment if necessary.

- 3.2 Obtain following equipment which is not stored in footlocker.
 - 3.2.1 Personnel film badge and TLD.
 - 3.2.2 One 0-5 R dosimeter for each team member. Sign-in on dosimeter log sheet.
 - 3.2.3 One full face respirator with charcoal filter for each Survey Team member. Mask will be donned upon instructions of the Dose Assessment Manager.
 - 3.2.4 Hand-held radio.
 - 3.2.5 Victoreen Portable Low Volume Air Sampler with filter holder.
 - 3.2.6 RM-14 Radiation Monitor with HP-190 Probe.
 - 3.2.7 Auto Digi-master or RO-2 dose rate meter.
- 3.3 Complete the following items prior to departing on the assigned survey route.
 - 3.3.1 Check operation of radio system, portable air sampler, radiation count rate monitor, and dose rate meter using equipment check-out procedures in Appendix I.
 - 3.3.2 Load survey equipment onto equipment belts and canvas bags, fill in Survey Team Status Board, and inform Survey Center Manager of your departure.
 - 3.3.3 Log time, date, and survey team members on survey map.
 - 3.3.4 Establish radio communication with Technical Support Center Radio Operator and advise of teams departure.
- 3.4 Protective clothing and full face masks with charcoal filters will be worn as directed by the Dose Assessment Manager. Internal contamination will be determined by a Whole Body Count after the survey.
- 3.5 Perform radiation surveys using the appropriate instructions of Appendix II while following the Survey Route instructions contained in Appendix III.

- 3.5.1 At each assigned survey point the team should report the following information to the Radio Operator:
- Location
 - Completed Actions
 - Results of Surveys
 - Departure for next Survey Point
- 3.5.2 Upon completion of Survey Route inform radio operator. The Dose Assessment Manager will assign an additional Survey Route or direct you to return to the Survey Center.
- 3.6 Upon returning to the Survey Center perform a survey of team personnel for contamination. If any contamination greater than 100 CPM above background is found contact the Survey Center Manager for decontamination instructions.
- 3.6.1 Give all filter cartridges, particulate filters, survey maps, and data records to Survey Center Manager.
- 3.6.2 Dispose of contaminated and potentially contaminated waste in an approved manner.
- 3.6.3 Re-stock, inventory, and seal Survey Team Equipment Foot-locker, stow in Survey Team Room.
- 3.6.4 Return radio system, portable air sampler, radiation count rate meter, and dose rate meter to the Survey Team Room and place on charge as appropriate.
- 3.6.5 Return 0-5 R dosimeters and sign-out on dosimeter log sheet.
- 3.6.7 Fill out Survey Team Status Board and inform Survey Center Manager.

A P P E N D I X I

EMERGENCY ON-SITE RADIATION SURVEY TEAM

EQUIPMENT CHECKOUT AND OPERATION

RADIO SYSTEM

The radio system consists of a hand-held radio and attached antenna. To checkout and operate the system, complete the following steps.

1. Ensure the antenna is securely screwed into the connection on the top of the radio. If a telescoping antenna is installed ensure it is extended to its full length when operating the radio.
2. Turn the channel selector switch to channel 1.
3. Turn the squelch knob full CCW.
4. Turn the volume knob CW to turn the radio on and adjust the volume level. A rushing sound should be heard.

NOTE: If no sound is heard unit is inoperable. Obtain new unit and inform Survey Center Manager.

5. Adjust squelch knob CW just enough to quiet radio. If squelch knob is turned too far CW weak signals will not be heard.
6. The general procedure for communicating on the radio should be as follows.
 - a) Station Called
 - b) Blue/Yellow Team
 - c) Message
 - d) "Over"

During a drill or exercise all fictitious data will be preceded with the words "This is a drill.....".

Examples:

"TSC, Blue Team, At location number 1, Over"

"TSC, Yellow Team, This is a drill, Results of the general area survey at location 6 are 6,500 Counts Per Minute above background, Over"

15. To transmit depress the push-to-talk switch on the side of the radio. Speak in a normal voice into the speaker/mike.
16. To receive, release the push-to-talk switch.

17. There may be times that TSC or EOF will be receiving communications from a team that you cannot hear. If this happens the Radio Operator will tell you to wait or standby. After he has completed his traffic he will ask you to transmit your information. Remember this is one big party line; everyone can't talk at once.
18. When you have been directed to secure your Survey Team, turn the radio off the place it in the charger located in the Survey Team Room at the Survey Center.

RM-14 RADIATION SURVEY METER

EQUIPMENT CHECK

1. Disconnect power cord from back of meter taking care not to turn test switch on.
2. Ensure that an HP-190 probe is connected to the detector jack.
3. Turn range switch to battery. Meter should read in the "BATT-OK" area.
4. Perform instrument source check.
5. Turn range switch to off.

EQUIPMENT OPERATIONS

1. Turn range switch to XI.
2. Place response switch in the "SLOW" position.
3. Adjust the volume control so that the audio indication (a click) can be heard.
4. The range switch should be adjusted such that the highest reading gives a mid-scale deflection.
5. All readings must be multiplied by the range switch setting (XI, X10, X100).
6. 2,200 CPM is approximately 1 mrem/hour.
7. Upon completion of the survey turn the unit off the return to the Survey Team Room. Unit should be recharged before the next use.

AUTO DIGI-MASTER DOSE RATE METER

EQUIPMENT CHECK

1. Turn unit on to be sure that the digital display lights.
2. Perform instrument source check.

EQUIPMENT OPERATION

1. Allow unit to complete one cycle (display will blink) before reading when turning unit on or when radiation level changes significantly.
2. Unit will automatically change from one range to the next. The reading is always direct.
3. The Digi-Master may be used to detect the presence of Beta but cannot be used for dose measurement of Beta. Also, Beta detection is only effective when the unit is operating in the mrem/hr range.
 - a. Take a reading with the Beta window closed and record.
 - b. Take a reading with the Beta window opened and record.
 - c. If the reading with the Beta window open is greater than the reading with the Beta window closed there is Beta radiation present.
 - d. If a Beta dose rate is needed a survey with an RO-2 or equivalent instrument must be made.
4. Upon completion of the survey turn the unit off and return to the Survey Team Room. Unit should be recharged before the next use.

RO-2 DOSE RATE METER

EQUIPMENT CHECK

1. Turn the function selector switch to the "BATT 1" and "BATT 2" positions. Meter should indicate above the battery cut-off line.
2. Perform instrument source check.

EQUIPMENT OPERATION

1. Zero the meter by turning the function selector switch to "ZERO" and turning the "ZERO ADJ" knob as necessary. The zero adjust may be made in a radiation field by placing the function selector switch at "ZERO ADJ".
2. To measure the radiation field position the function selector switch to the lowest range which provides a mid-scale deflection of the meter.
3. With the Beta shield closed the meter will read the whole body Gamma dose rate.
4. To obtain a Beta dose rate measurement perform the following:

CAUTION: The face of the beta window is very thin. Whenever the Beta shield is open guard the shield against damage by puncture or contamination by dust or dirt.

- a. Take an area measurement with the Beta shield closed.
 - b. Open the sliding Beta shield on the bottom of the case and take an area measurement.
 - c. Subtract the closed shield reading from the open shield reading and multiply by the Beta correction factor marked on the instrument.
 - d. This number is the Beta dose rate for that area.
5. When the survey is completed turn the function selector switch to OFF.

BATTERY POWERED LOW VOLUME AIR SAMPLER

EQUIPMENT CHECK

1. Turn power switch on.
2. Observe totalizer for movement.
3. Turn power switch off.

EQUIPMENT OPERATION

1. Record on sample envelopes following information;
 - a. Date
 - b. Time
 - c. Location
 - d. Totalizer Reading (A)
2. Ensure filter cartridge contains a GY-130 Silver Zeolite cartridge and a particulate filter. Connect filter cartridge to sampler.
3. Turn sampler ON and run sampler for approximately 30 minutes.
4. Turn sampler OFF and record following information on sample envelopes;
 - a. Time
 - b. Totalizer Reading (B)
5. Sample volume in cubic centimeters (cc) =
$$(\text{Totalizer Reading B} - \text{Totalizer A}) \times (\text{Calibration Factor})$$

NOTE: Calibration Factor is noted on side of sampler.

A P P E N D I X I I
RADIATION SURVEY INSTRUCTIONS

GENERAL AREA RADIATION SURVEY

1. A general radiation area survey should be conducted while moving between defined survey points, and at the specific survey points.
2. The survey should be conducted using an RM-14 Radiation Monitor with an HP-190 probe.
3. When conducting a moving survey the HP-190 probe should be held in a horizontal position and protected from the elements and wind.
4. If the RM-14 reading changes more than 1,000 CPM stop and conduct a survey for Beta using the Auto Digi-Master or RO-2.
5. Report the results of the survey to the Radio Operator at the next survey point, or after completion of the Beta survey.

SURVEY TO DETERMINE PRESENCE
OF BETA RADIATION

1. If the General Area Radiation Survey shows a change of 1000 CPM on the RM-14, or if the "plume" is suspected to be in your area, a survey to detect the presence of Beta radiation should be conducted.
2. Using an Auto Digi-Master, or RO-2 dose rate meter conduct the following surveys.
 - a. With the detector window aimed up:

Beta shield open _____

Beta shield closed _____

Difference #1 = (open reading - closed reading)
 - b. With the detector window aimed down:

Beta shield open _____

Beta shield closed _____

Difference #2 = (open reading - closed reading)
3. If either difference #1 or difference #2 from step 2 is positive this is an indication that Beta radiation is present.
 - a. If both difference #1 and #2 are positive, this is an indication that you are in the plume.
 - b. If only difference #1 is positive, this is an indication that the plume is overhead.
4. Report the results of the survey to the Radio Operator and await further instructions from the Dose Assessment Manager.

LOW VOLUME AIR SAMPLE

1. Draw air through a GY-130 silver zeolite cartridge and particulate filter using a low volume air sampler for approximately 30 minutes.
2. Record the sample date, time, and location on two sample envelopes on the back of the survey map.
3. Determine the background radiation level using the RM-14 Radiation Monitor and HP-190 probe. Record the reading on each envelope, and on the survey map.
4. Using onion skins remove the GY-130 silver zeolite cartridge from the sample holder and read the activity level with the RM-14 Radiation Monitor and HP-190 probe by holding the probe window on the inlet side of the cartridge filter. DO NOT TOUCH THE PROBE WINDOW WITH THE CARTRIDGE. Record the reading on one envelope and place the cartridge in the envelope. Record the reading on the back of the survey map.
5. Read the activity level of the particulate filter using the RM-14 Radiation Monitor and HP-190 probe. DO NOT TOUCH THE PROBE WINDOW WITH THE PARTICULATE FILTER. Record the reading on the other envelope and place the particulate filter in the envelope. Record the reading on the back of the survey map.
6. Remove the onion skins and discard in a plastic bag. Treat as contaminated material.
7. Report the following information to the Radio Operator:
 - a. Sample location
 - b. Time sample was taken
 - c. Volume of air sample in CC
 - d. Background count rate in CPM
 - e. GY-140 silver zeolite cartridge count rate in CPM
 - f. Particulate filter count rate in CPM

NOTE: Field calculations of the airborne activity level may be performed as follows:

Iodine-131 (GY-130 cartridge)

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (2.4 \times 10^{-5})}{(\text{Volume of Sample in Cubic Centimeters})} = \frac{\text{uCi/cc}}{\text{Iodine-131}}$$

Particulate

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (8.34 \times 10^{-5})}{(\text{Volume of Sample in Cubic Centimeters})} = \frac{\text{uCi/cc}}{\text{Particulate}}$$

CHANGING FILTERS AT FIXED ENVIRONMENTAL STATIONS

1. Record the following information on the sample envelope left from the previous filter change:
 - a. Date
 - b. Time
 - c. System Vacuum (inches)
 - d. Gasmeter reading (cubic feet)
 - e. Total hour meter (record in column marked "OFF")
2. Turn pump off
3. Using onion skins remove the filter holder at the quick disconnect joint.
4. Unscrew the outside retaining ring and remove the particulate filter from the holder and place in the sample envelope.
5. If a charcoal cartridge was in use transfer the information on the particulate filter envelope to a new envelope and place the charcoal cartridge in the envelope.
6. Place a new GY-130 silver zeolite cartridge in the sample head.
7. Place a new particulate filter in the holder, replace the retaining ring and reconnect holder to the pump at the quick disconnect joint.
8. Remove onion skins and place in a plastic bag. Treat as contaminated.
9. Turn the pump on.
10. Record the following information to two new envelopes. Mark one envelope "GY-130 silver zeolite".
 - a. Station number
 - b. Date
 - c. Time
 - d. System vacuum (inches)
 - e. Gas meter reading (cubic feet)
 - f. Total Hour meter (record in the "ON" column)
11. Place the new envelopes inside the monitor cabinet.
12. Bring the envelopes containing the cartridge/filter removed to the Survey Center at the completion of your assigned route or when directed by the Dose Assessment Manager.

A P P E N D I X I I I

ON SITE RADIATION SURVEY TEAM INSTRUCTIONS

BLUE TEAM

SURVEY ROUTE INSTRUCTIONS

1. From the Survey Center proceed northeast to the edge of the grass.
2. Turn south across the lawn and proceed to environmental station #4 and change the filter cartridge.
3. Proceed southeast to Manor House driveway, follow driveway to where it turns north, proceed east out of the trees into orchard.
4. Go through orchard, then turn north and proceed to environmental station #3 and change the filter cartridge.
5. Proceed west across field and through woods to Manor House driveway.
6. Go north on Manor House driveway to the lake shore.
7. Proceed east to environmental station #2 and change the filter cartridge.
8. Proceed west along the lake shore to the plant fence.
9. Proceed along the plant fence to the Guard House.
10. If the Central Alarm Station (CAS) and Secondary Alarm Station (SAS) are manned contact CAS on the radio for access to the site. Otherwise use "hard key" to gain access to the site.
11. Proceed east from the Guard House along access road and across south side of plant building.
12. Circle across grass towards Upper-Radwaste Storage Area, continuing to plant fence.
13. Continue west along plant fence to the Screen House.
14. Proceed south along side of plant building and return to Guard House.
15. Report to Radio Operator for instructions.

YELLOW TEAM

SURVEY ROUTE INSTRUCTIONS

1. Proceed west from the Survey Center to plant site road.
2. Continue north across the bridge to environmental station #5 and change the filter cartridge.
3. Proceed west along Deer Creek and the parking lot to environmental station #6 and change the filter cartridge.
4. Proceed west through the apple orchard approximately 100 yards.
5. Turn north and continue through the apple orchard, towards the hill, to the northeast corner of the plant fence.
6. Proceed south along the plant fence to environmental station #7 and change the filter cartridge.
7. Continue along the plant fence to the Guard House.
8. If the Central Alarm Station (CAS) and Secondary Alarm Station (SAS) are manned contact CAS on the radio for access to the site. Otherwise use "hard key" to gain access to the site.
9. Proceed west from Guard House to the access road.
10. Continue north on the access road and across the grass to the plant fence.
11. Proceed east along the plant fence to the discharge canal.
12. Proceed south along the west side of the plant building and return to the Guard House.
13. Report to Radio Operator for instructions.

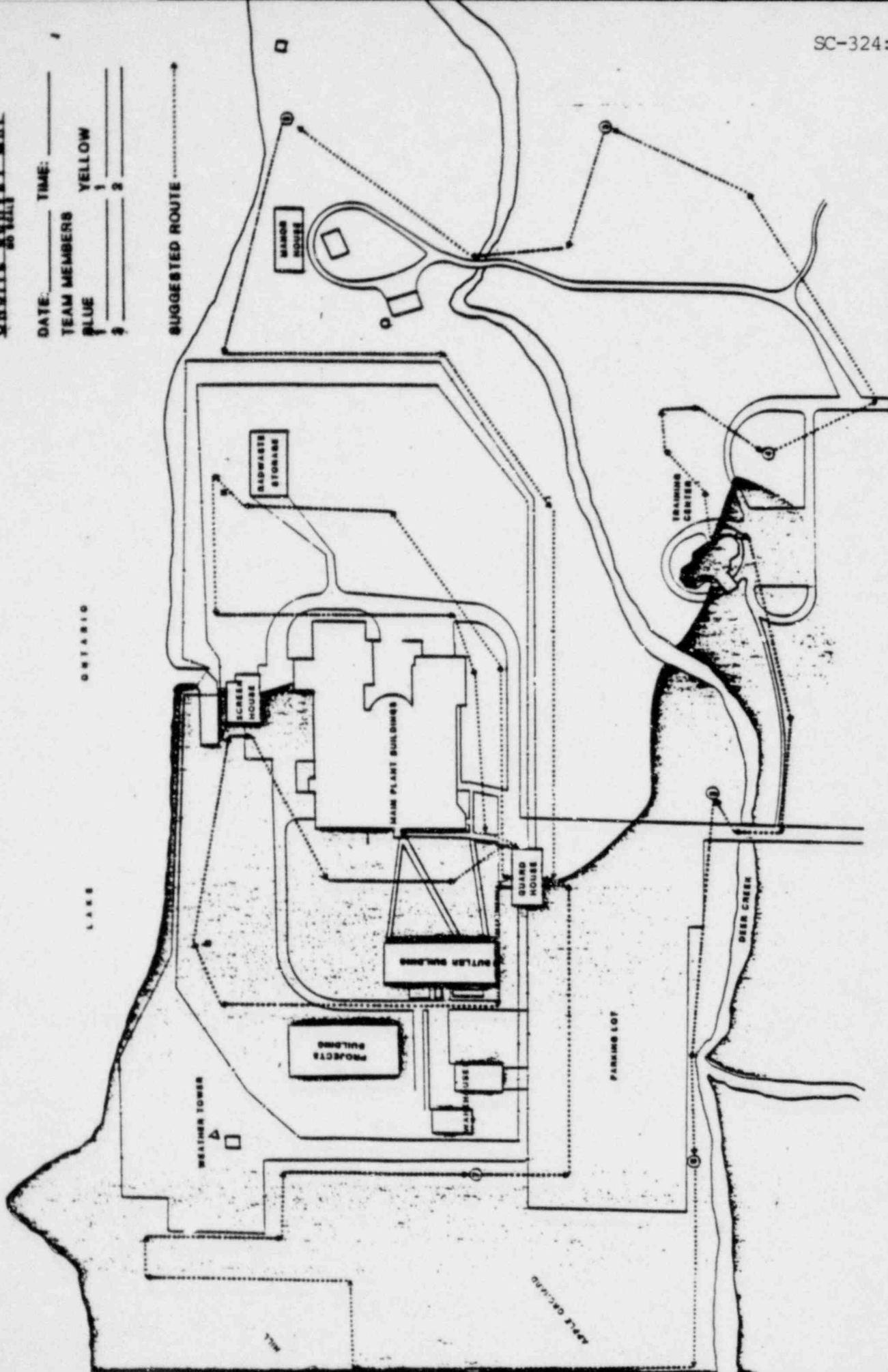
~~ON SITE SURVEY MAP~~

DATE: _____ TIME: _____

TEAM MEMBERS

BLUE YELLOW

SUGGESTED ROUTE



ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-440

REV. NO. 0

IN-PLANT RADIATION MONITORING

TECHNICAL REVIEW

PORC REVIEW DATE 4-14-82

JC Bedoni
QC REVIEW

Bruno A. ...
PLANT SUPERINTENDENT

4-17-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 3 PAGES

SC-440IN-PLANT RADIATION MONITORING1.0 PURPOSE:

- 1.1 To establish the guidelines for in-plant radiation monitoring during a radiation emergency, unusual event or greater. For a Local Radiation emergency normal HP practices may be used.

2.0 REFERENCES:

- 2.1 Plant procedures - HP-5.1, HP-6.1 and HP-11.4

3.0 INSTRUCTIONS:

PRECAUTION: The person(s) performing monitoring should not exceed normal plant dose guidelines (< 2 Rem). If this limit is being approached, the monitoring should be ceased until an assessment is made and the necessity is ascertained for receiving emergency exposure(s) up to emergency guidelines.

PRECAUTION: A person shall not knowingly expose himself to more than 25 Rem to the whole body to save vital plant equipment. Exposure up to 100 Rem may be acceptable to save a life; due consideration shall be given to the risk-benefit situation, i.e., the chance of actually saving a life.

NOTE: Normally, the first in-plant survey will originate from Control Room, using emergency equipment located in Control Room. Additional equipment may be obtained from the Health Physics Office. Other in-plant radiation survey teams, if originating from off-site, shall obtain protective clothing and emergency equipment from the Emergency Survey Center.

- 3.1 The in-plant radiation survey team consisting of two or more persons shall:

- 3.1.1 Dress in full protective clothing.

3.1.2 Obtain the following equipment:

3.1.2.1 Full face respirator/self-contained breathing apparatus and don prior to commencing survey unless otherwise directed.

PRECAUTION: Be aware air supply may limit activities.

3.1.2.2 High range dosimeter.

3.1.2.3 T.L.D.

3.1.2.4 High Range Survey Meter (> 1000 R/hr max)

3.1.2.5 Portable air sampler with particulate filter and silver zeolite cartridge. If lapel sampler is used it may be obtained in the HP Lab using HP-11.2 for guidance. If high volume Radeco 809B-2 is used, obtain a sampler from Tech Support Center and perform sampling per SC-421 (3.4).

3.1.2.6 Smear paper.

3.1.3 Verify that all equipment is operable.

3.1.4 Notify Shift Supervisor of readiness

3.1.4.1 The Shift Supervisor shall dispatch the survey team to the scene of the radiation incident unless otherwise specified by the Emergency Coordinator.

PRECAUTION: Notify the Shift Supervisor before entering an incident area and maintain communications as much as possible.

3.1.5 Upon arrival at the scene of the emergency, determine/perform the following:

3.1.5.1 Dose Rate Survey

3.1.5.2 Personnel contamination and/or extent of personnel injury if applicable.

3.1.5.3 Take air sample. Air sample may be counted in plant environmental lab which should be in a lower background area than the plant count room.

3.1.5.4 Surface contamination survey.

NOTE: Steps 3.1.5.3 and 3.1.5.4 will be completed at a later time in the counting room.

- 3.1.6 Report all findings to the Shift Supervisor as soon as possible.
- 3.2 Establish necessary controls to limit contamination, exposure to radiation and control access to the scene, based upon the criteria found in the Radiation control Manual, (A-1).
- 3.3 Subsequent surveys will be made following instructions of Emergency Coordinator or Health Physicist.

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-322

REV. NO. 0

MANNING THE EMERGENCY SURVEY CENTER

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. B. Dine
QC REVIEW

B. M. Peterson
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 4 PAGES

SC-322MANNING THE EMERGENCY SURVEY CENTER1.0 PURPOSE:

- 1.1 The purpose of this procedure is to designate individuals who should report to the Emergency Survey Center for an Alert level or greater event. These personnel will assist the TSC and OSC with emergency functions.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 SC-230 Immediate Entry
- 2.4 SC-223 Accountability
- 2.5 SC-213 Site Evacuation
- 2.6 SC-302 Manning the Technical Support Center
- 2.7 SC-312 Manning the Operational Support Center
- 2.8 SC-323 Emergency Off Site Radiation Survey Teams
- 2.9 SC-324 Emergency On Site Radiation Survey Teams

3.0 INSTRUCTIONS:

- 3.1 During normal working hours (or if on site) the following persons report directly to the Emergency Survey Center upon announcement of an Alert level or greater
1. Quality Control Engineer or alternate
 2. Designated Survey Team Members per SC-600
- 3.2 Upon Arrival at the Emergency Survey Center
- 3.2.1 Assure ESC is open
- 3.2.2 Obtain appropriate tag from Survey Center Tag Board and log name under tag.

- 3.2.3 Follow instruction on tag
- 3.3 During off duty hours individuals will be called to report to Ginna Station. You may report directly to the Emergency Survey Center and proceed with Step 3.2 above.
- 3.4 Tag instruction found in Attachment I.

ATTACHMENT I to SC-322
Tag Board Assignment

Emergency Survey Center Manager

Check out high range survey instrument and survey auditorium, basement areas, determining if safe (< 50 mr/hr). Survey building exterior and advise those going to T.S.C.	REVERSE SIDE
	BLANK

Assist survey teams to organize and maintain team on maps.

Notify Security at SAS of T.S.C. members (by name) who will request access to the site.

Obtain accountability of all plant personnel.

Emergency Survey Center Communicator

Report to Survey Center Manager	REVERSE SIDE
	BLANK

On-Site Survey Team Blue

Obtain Blue foot locker	REVERSE SIDE
Follow procedure SC-324 found inside foot locker	BLANK

On-Site Survey Team Yellow

Obtain Yellow foot locker	REVERSE SIDE
Follow procedure SC- 324 found inside foot locker	BLANK

Spare Survey Team White

Report to Survey Center Manager	REVERSE SIDE
	BLANK
Obtain a dosimeter	

Follow procedure SC- 323 and 324 found inside foot locker

Standby in E.C.S. Equipment Room

Off-Site Survey Team Green

Obtain Green foot locker	REVERSE SIDE
Follow procedure SC-323 found inside foot locker	BLANK

Off-Site Survey Team Red

Obtain Red foot locker	REVERSE SIDE
Follow procedure SC- 323 found inside foot locker	BLANK

Off-Site Survey Team Orange

Obtain Orange foot locker	REVERSE SIDE
Follow procedure SC- 323 found inside foot locker	BLANK

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-312

REV. NO. 0

MANNING THE OPERATIONAL SUPPORT CENTER

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodine
QC REVIEW

Bruce King
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 4 PAGES

SC-312MANNING THE OPERATIONAL SUPPORT CENTER1.0 PURPOSE:

- 1.1 The purpose of this procedure is to provide guidance for personnel who will staff the Operational Support Center (OSC). These personnel will assist the TSC and Control Room with emergency functions as requested.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 SC-230 Immediate Entry
- 2.4 SC-233 Search and Rescue

3.0 INSTRUCTIONS:

- 3.1 The Auxiliary Operators Office is designated as the Operations Support Center.
- 3.2 During normal working hours (or if on site) the following persons will report directly to the OSC upon announcement of an Alert level or greater.

1. Pipefitter Foreman
2. Machinist Foreman
3. I & C Foreman
4. Electrician Foreman
5. Maintenance Foreman
6. Health Physic Foreman

- 3.2.1 Additional personnel as requested will be obtained from the shops or Emergency Survey Center.

- 3.3 Personnel at the Training Center Auditorium will be under the direction of the Survey Center Manager until they have been specifically assigned to the OSC or another designated function.
- 3.3.1 Personnel assigned to the OSC will be under the direction of the Plant Maintenance Assessment Manager.
- 3.4 Upon arrival at OSC:
 - 3.4.1 Assure your name is posted on TSC magnetic organization chart.
 - 3.4.2 Perform responsibilities as described in SC-200.
 - 3.4.3 Health Physics Foreman or designee will check radiation levels and airborne activity in OSC. Report results to Plant Maintenance Assessment Manager with recommendations.
- 3.5 During off duty hours individuals will be called to report to Ginna Station. They may report directly to the OSC using normal entrance procedure.
 - 3.5.1 Or they may be directed to the Emergency Survey Center where they shall:
 - 3.5.1.1 Obtain Film Badge
 - 3.5.1.2 Obtain appropriate tag from survey center tag board and log name under tag.
 - 3.5.1.3 Follow instructions on tag.
 - 3.5.1.4 Refer to SC-230 Immediate Entry for additional guidance.
- 3.6 Tag assignments found in attachment I.

ATTACHMENT I to SC-312

TAG BOARD ASSIGNMENTS

Pipefitter Foreman

Proceed to O.S.C.

Use protective guidance
of Health Physicist at
T.S.C. or actions on
reverse side.

Report to Plant Maintenance
Assessment Manager.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask with Filter

Machinist Foreman

Proceed to O.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Plant Maintenance
Assesment Manager.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask with Filter

Instrument and Control Foreman

Proceed to O.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Plant Maintenance
Assessment Manager.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask with Filter

Electrical Foreman

Proceed to O.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Plant Maintenance
Assessment Manager

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask with Filter

ATTACHMENT I to SC-312

TAG BOARD ASSIGNMENTS (CON'T)

Maintenance Foreman

Proceed to O.S.C.

Use protective guidance
of Health Physicist at
T.S.C. or actions on
reverse side.

Report to Plant Maintenance
Assessment Manager.

REVERSE SIDE

Obtain and Use

Film Badge

Dosimeter

Dose Rate Meter

Protective Clothing

Full Face Mask with Filter

Health Physics Foreman

Proceed to O.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Plant Maintenance
Assesment Manager.

REVERSE SIDE

Obtain and Use

Film Badge

Dosimeter

Dose Rate Meter

Protective Clothing

Full Face Mask with Filter

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-302

REV. NO. 0

MANNING THE TECHNICAL SUPPORT CENTER

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodini
QC REVIEW

B. B. Shaw
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 8 PAGES

SC-302MANNING THE TECHNICAL SUPPORT CENTER1.0 PURPOSE:

- 1.1 To designate individuals who would report to the Technical Support Center for an Alert level or greater event. The Technical Support Center personnel provide technical review and advice to the Shift Supervisor and assist in recovery operations.

2.0 REFERENCES:

- 2.1 SC-213 Accountability of Personnel
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 SC-202 Alert
- 2.4 SC-203 Site Emergency
- 2.5 SC-204 General Emergency

3.0 INSTRUCTIONS:

- 3.1 During normal working hours (or if on site) the following persons will report directly to the Technical Support Center upon announcement of an Alert condition or greater.

1. Plant Superintendent or Assistant
2. Operations Engineer or alternate
3. Supervisor of HP and Chemistry
4. Plant Health Physicist or alternate
5. Technical Engineer or alternate
6. Special Project Engineer or alternate
7. Nuclear Engineer or alternate
8. I & C Supervisor or alternate
9. Maintenance Engineer or alternate

- 3.1 con't
 - 10. Maintenance Supervisor or alternate
 - 11. Office Supervisor or alternate
 - 12. Data Analyst
 - 13. Security Manager or alternate
- 3.2 Upon arrival at TSC
 - 3.2.1 Individuals will place their names under appropriate position on magnetic organization chart.
 - 3.2.2 Obtain necessary envelopes/procedures to perform functions from Technical Library.
 - 3.2.3 Perform responsibilities as described in SC-200.
 - 3.2.4 Managers will report to Emergency Coordinator status of their manpower and needs.
 - 3.2.5 Health Physicist check radiation levels and airborne activity in TSC. Report results to Emergency Coordinator with recommendations.
 - 3.2.6 Plant Superintendent or alternate will assume responsibility of Emergency Coordinator from the Shift Supervisor after:
 - 3.2.6.1 Assuring adequate staff available in TSC
 - 3.2.6.2 Assuring Radiation levels habitable in TSC
 - 3.2.6.3 Assuring he is familiar with present plant status.
 - 3.2.6.4 Assuring all TSC managers and Shift Supervisor are aware he is assuming Emergency Coordinator responsibility.
 - 3.2.7 If radiation levels are greater than 50 mr/hr in TSC move the following to the Shift Supervisor's office.
 - 3.2.7.1 Operation Manager
 - 3.2.7.2 Plant Health Physics/Chemistry Manager
 - 3.2.7.3 Move the remaining personnel to the Emergency Survey Center.
- 3.3 During off-duty hours individuals will be called to report to Ginna Station. They may report directly to the TSC using normal entrance procedures.

- 3.3.1 Or they may be directed to the Emergency Survey Center where they shall
 - 3.3.1.1 Obtain Film Badge
 - 3.3.1.2 Obtain appropriate tag from survey center tag board and log name under tag
 - 3.3.1.3 Follow instructions on tag
 - 3.3.1.4 Refer to SC-230 Immediate Entry for additional guidance.
- 3.4 Tag instruction found in attachment I

ATTACHMENT I to SC-302

TAG BOARD ASSIGNMENTS

Emergency Coordinator

Proceed to T.S.C.

Use Protective guidance
of Health Physicist at
T.S.C. or action on
reverse

Notify C.R. of arrival at
T.S.C.

Notify Survey Center of
radiation levels in going
to T.S.C.

INITIATE SC-200 and other
necessary procedures.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Assistant Emergency Coordinator

Notify Emergency Coordinator
of arrival at Emergency
Survey Center

Assist as needed

Proceed to T.S.C. as needed.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter.

Plant Assessment Manager

Proceed to T.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Emergency Coordinator

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Dose Assessment Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or action on reverse side.

Obtain and Use

Start Procedure SC-

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Assist Emergency Coordinator
with Offsite consequences

Maintenance Assessment Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or action on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Technical Assessment Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or action on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Nuclear Assessment Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or action on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Instrument Control and Electrical Systems Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Mechanical and Hydraulic Systems Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Operations Assessment Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Notify Control Room of your
arrival at T.S.C.

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Report to Plant Assessment
Manager

Computer Analyst

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Report to Plant Assessment
Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Health Physics and Chemistry Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Assist Plant Assessment
Manager in evaluation of
recovery procedures.

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Health Physics and Chemistry Technician

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side

Obtain and Use

Report to Health Physics and
Chemistry Manager

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Administration and Communication Manager

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Report to Emergency Coordinator

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Radio Operator

Proceed to T.S.C.

REVERSE SIDE

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Obtain and Use

Report to Administration
and Communication Manager.

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Switchboard Operator

Proceed to T.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Administration and
Communications Manager

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Communicator

Proceed to T.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Administration and
Communications Manager

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Messenger

Proceed to T.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Administration and
Communications Manager

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

Security Manager

Proceed to T.S.C.

Use protective guidance of
Health Physicist at T.S.C.
or actions on reverse side.

Report to Emergency Coordinator.

REVERSE SIDE

Obtain and Use

Film Badge
Dosimeter
Dose Rate Meter
Protective Clothing
Full Face Mask and Filter

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-240

REV. NO. 0

PROTECTIVE ACTION RECOMMENDATIONS

TECHNICAL REVIEW

PORC REVIEW DATE 4-14-82

JC Bolini
QC REVIEW

Bruce A. Shaw
PLANT SUPERINTENDENT

4-17-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 4 PAGES

SC-240PROTECTIVE ACTION RECOMMENDATIONS1.0 PURPOSE:

- 1.1 Provide for the Shift Supervisor a method to estimate post accident dose to the population around the Ginna Plant using Control Room indications.
- 1.2 Provide guidance for recommending protective actions to the State of New York, Wayne County and Monroe County during the first hour of an accident.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 NYS Radiological Emergency Preparedness Plan
- 2.3 EPA-520 Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Feb. 1980)
- 2.4 SC-420 Estimating of Offsite Dose.

3.0 INSTRUCTIONS:

- 3.1 Using Attachment II Estimated Dose Levels, determine the plant condition that best describes the emergency situation and record:

Whole Body Dose _____ Rem

Thyroid Inhalation Dose _____ Rem

If the plant condition is not reflected on Attachment II obtain the Plant Vent Gas reading using the SPING.

- a Key on
- b Push data button
- c Push 0,2,0,7 buttons
- d Push print button
- e Push enter button
- f Record reading _____ uci/cc
- g Multiply reading by X 15 *
 _____ Rem Whole Body for 2 Hr exposure

If SPING is out of service use the Plant Vent Gas Monitor
R-14 reading and refer to S-14.2 to determine release in uci/cc

Multiply reading by X 15 *

 Rem Whole Body for 2
hour exposure.

* Multiplier from SC-420 Estimating Offsite Doses.

- 3.2 Select the highest estimated Whole Body Dose
 Rem Whole Body
- 3.3 Determine protective action using Rem Whole Body from step 3.2
(Attachment I for information only)
 - 3.3.1 Less than 1 Rem - No protective action
 - 3.3.2 > 1 Rem but < 5 Rem - Shelter population within 10 miles
downwind.
 - 3.3.3 > 5 Rem - Evacuate population within 10 miles downwind.
- 3.4 Select the estimated Thyroid Inhalation Dose
 Rem Thyroid
- 3.5 Determine protective action using Rem Thyroid from step 3.4
(Attachment I for information only)
 - 3.5.1 Less than 5 Rem - Not protective action
 - 3.5.2 > 5R but < 25 Rem - Shelter population within 10 miles downwind.
 - 3.5.3 > 25 Rem - Evacuate population within 10 miles downwind.
- 3.6 Record highest protective action on Initial Notification Status
form SC-701 step 8.

ATTACHMENT I

Projected Doses (Rem) to the Population	Recommended Actions (a)	Comments
Whole body <1	No planned protective actions. (b) State may issue an advisory to seek shelter and await further instructions.	Previously recommended protective actions may be reconsidered or terminated.
Tyroid < 5	Monitor environmental radiation levels.	
Whole body 1 to <5	Seek shelter as a minimum. Consider evacuation. Evacuate unless constraints make it impractical.	If constraints exist, special consideration should be given for evacuation of children and pregnant women.
Thyroid 5 to <25	Monitor environmental radiation levels. Control access.	
Whole Body 5 and above	Conduct mandatory evacuation. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access.	Seeking shelter would be an alternative if evacuation were not immediately possible.
Tyroid 25 and above		

- (a) These actions are recommended for planning purposes. Protective action decisions at the time of the incident must take existing conditions into consideration.
- (b) At the time of the incident, officials may implement low-impact protective actions in keeping with the principle of maintaining radiation exposures as low as reasonably achievable.

ATTACHMENT IIESTIMATED DOSE LEVELS

	TWO HOUR DOSE OFFSITE (AT 1500' RADIUS FROM REACTOR)		ESTIMATED QUANTITIES RELEASED	
	WHOLE BODY	THYROID INHALATION	NOBLE GASES	I-131
	(REM)	(REM)		
No Spray Pumps, and 2 Fans** on after proper safety injection core cooling		89		2 Ci/day
1 Spray Pump + 1 Fan on** after proper safety injection core cooling		29		.7 Ci/day
2 Spray Pumps on after** proper safety injection core cooling		20		.5 Ci/day
"Design Basis Loss of* Coolant Accident with Iodine removal by Spray & Filter" and no breach of containment.	0.6	15.5	35 Ci/day	.35/day
Gas Decay Tank Rupture (Puff)*	0.3	< 10	150 Ci	
Control Rod Ejection*	0.19	5.0		
Steam Line Rupture Outside* C.V. - w/ich tube leak	negl	1.8	5 Ci	.004 Ci
- no tube leak	-	-		
Refueling Incident with* Charcoal System On	0.17	1.7	1.96x10 ⁴	2.7 Ci
Steam Line Rupture in C.V.*	0.1	1.2	.005 Ci	.001mCi
Steam Gen. Tube Rupture*	0.003	0.15	5 Ci	.5mCi

*NRC Safety Evaluation (for siting) values reduced by factor of 10.

**Operation of 1 Accumulator and 1 RHR Pump and 2 SI pumps: FSAR

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

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GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-230

REV. NO. 0

IMMEDIATE ENTRY

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

JC Bodini
QC REVIEW

John Noon
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-230IMMEDIATE ENTRY1.0 PURPOSE:

- 1.1 To provide instructions for immediate entry to the Ginna site from the Emergency Survey Center as required by the Emergency Response Organization.

2.0 REFERENCES:

- 2.1 A-1 Radiation Control Manual.
- 2.2 SC-302 manning the Technical Support Center.
- 2.3 SC-312 manning the Operational Support Center.

3.0 INSTRUCTIONS:

- 3.1 Designated personnel may be required to enter the site as members of Emergency Response Organization.
- 3.2 The size of entry teams shall be maximized however they must consist of two individuals.
- 3.3 Determine wind direction, initiating condition and post on status board.
- 3.4 The entry team shall obtain necessary equipment as recommended by a Health Physicist or in his absence the equipment listed below:
 - 3.4.1 Film badge
 - 3.4.2 High range dosimeter (0-5R)
 - 3.4.3 High range dose rate meter (0-1000 R/hr)
 - 3.4.4 Anti-contamination clothing
 - 3.4.5 Full face mask with charcoal filter
 - 3.4.6 Radio
- 3.5 Notify by radio Security and Radio Communicator (TSC or Control Room) that personnel by name will need entry to the site.

- 3.6 Notify Emergency Survey Center Manager and/or log in on tag board team is leaving for site.
- 3.7 Proceed to enter site to perform your designated function.
- 3.7.1 All entry teams with radiation survey meter shall report survey results to Health Physicist and Emergency Survey Center Manager.
- 3.7.2 Do not enter areas > 2 R/hr unless directed by Emergency Coordinator.
- 3.8 Remove anti-contamination clothing at TSC step off pad or inside entrance door to TSC.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-213

REV. NO. 0

ACCOUNTABILITY OF PERSONNEL

TECHNICAL REVIEW

PORC REVIEW DATE 3-17-82

JC Bodine
QC REVIEW

B. B. B. B.
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-213

ACCOUNTABILITY OF PERSONNEL1.0 PURPOSE:

- 1.1 Provide instruction for accountability of personnel within the plant protected area in the event of plant evacuation.

2.0 REFERENCES:

- 2.1 SC-233 Search and Research Operation
- 2.2 GS-10.0, Security Personnel Actions During a Radiation Emergency
- 2.3 GS-17.0, Accountability of Personnel During Emergency Conditions

3.0 INSTRUCTIONS:

- 3.1 Upon leaving the site all personnel will turn in the site photo identification card to Security.
 - 3.1.1 Security personnel will deactivate each card upon exiting b, the normal procedure.
 - 3.1.2 After the last person has exited the site, Security shall request an Employee Onsite List from the computer.
- 3.2 Security personnel shall bring the Employee Onsite List to the Emergency Survey Center.
- 3.3 The Technical Support Center Administrative/Communications Manager shall report the names of all personnel in the TSC, and all persons reported to be in the Control Room and Operation Support Center, to the Emergency Survey Center Manager.
- 3.4 With Security, the Emergency Survey Center Manager shall cross off all names reported to be at the other Emergency Centers and Security personnel onsite.
 - 3.4.1 The names of personnel not accounted for shall be reported to the Emergency Coordinator.
- 3.5 The Emergency Coordinator shall determine the necessity of Search and Rescue Operations for unaccounted personnel. SC-233

- 3.5.1 Unaccounted personnel shall be paged and requested to call the Operator.
- 3.5.2 Consider the possibility that the unaccounted personnel may have left the site. Check guard at plant driveway for personnel leaving.
- 3.5.3 Consider a telephone call to individual's home.
- 3.6 Should the Security computer be out of service during the site evacuation.
 - 3.6.1 A senior member of each shop or work group shall prepare a list of their fellow workers in the Training Center and submit the list to Security Personnel.
 - 3.6.2 This list will be checked with group managers to determine any personnel not accounted for.
 - 3.6.3 Personnel unaccounted for shall be reported as per step 3.4 above.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

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GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-212

REV. NO. 0

SITE EVACUATION

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

J. B. Bordini
QC REVIEW

J. M. Nam
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-212SITE EVACUATION1.0 PURPOSE:

- 1.1 The purpose of the Site Evacuation procedure is to assign responsibilities and provide guidance to personnel in the event it becomes necessary to evacuate the site because of a fire, chemical hazard, radiation related incident, or other situations which threaten the health and/or safety of personnel on site.

2.0 REFERENCES:

- 2.1 SC-203 Site Emergency
- 2.2 GS-10 Security Personnel Actions During a Radiation Emergency

3.0 INSTRUCTIONS:

- 3.1 The decision to evacuate the site may be made by the Shift Supervisor or the Emergency Coordinator if the Emergency Plan has been activated.
- 3.1.1 The decision to evacuate the site dictates that the Emergency Plan be activated at, or elevated to, a Site Emergency Classification.
- 3.2 Control Room Personnel will actuate the Site Evacuation Alarm when directed by the Shift Supervisor to initiate a Site Evacuation.
- 3.3 Upon hearing the Site Evacuation alarm, personnel shall take the following actions:
- 3.3.1 The on duty Operators, Shift Supervisor, Shift Technical Advisor, and H.P. Technician will report to the Control Room.
- 3.3.2 Those personnel with assigned function for a Site Emergency will report to the Technical Support Center, Operations Support Center or Survey Center as appropriate.
- 3.3.3 Health Physics Technicians not on shift will pick up survey instruments and SWP-RWP sign in sheets from the Health Physics Office and report to the Survey Center.
- 3.3.4 If a fire is coincident with the Site Evacuation the Fire Brigade will respond to the fire unless directed otherwise by the Shift Supervisor.

- 3.3.5 All other personnel will evacuate the site and proceed to the Training Center Auditorium.
- 3.3.5.1 Guides assigned to visitors are responsible for escorting the visitor to the Training Center Auditorium.
- 3.4 Evacuation Procedure
 - 3.4.1 Personnel shall immediately secure any potentially hazardous devices such as power tools and equipment, grinders, welders, cutting torches, etc.
 - 3.4.2 Personnel shall exit the site through the guard house, retain their personnel dosimetry, deposit their "card key" at the guard house, and WALK to the Training Center Auditorium.
 - 3.4.2.1 Personnel who are outside of buildings shall WALK by the most direct route to the guard house.
 - 3.4.2.2 Personnel who are inside of buildings but NOT in Controlled Radiation Areas shall exit the building by the most convenient door and WALK by the most direct route to the guard house.
 - 3.4.2.3 Personnel who ARE IN a Controlled Radiation Area shall exit the area and building by the most convenient door and remove protective shoe coverings, or follow the instructions of the Health Physics Department Personnel if present. WALK by the most direct route to the guard house.
- Personnel who did not remove their protective clothing and perform a Personnel Survey when leaving the Controlled Radiation Area will proceed to the Training Center Basement for removal of protective clothing and Personnel Survey.
- 3.5 Personnel in the Training Center Auditorium are under the direction of the Survey Center Manager and shall remain there until directed otherwise.

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-206

REV. NO. 0

MAJOR RELEASE TO THE LAKE

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Bolina
QC REVIEW

Brink Snow
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-206MAJOR RELEASE TO THE LAKE1.0 PURPOSE:

- 1.1 To provide instructions for actions to be taken if a liquid release is suspected of exceeding the maximum permissible concentration as specified in 10 CFR 20.

2.0 REFERENCES:

- 2.1 None.

3.0 INSTRUCTIONS:

- 3.1 The following conditions may indicate a major radioactive release to the lake:

- 3.1.1 Radioactive spill flowing into the lake or creek.
- 3.1.2 Actual liquid waste release rate greater than recommended.
- 3.1.3 Radiation monitor alarm on R-16 Containment Fan Coolers Monitor.
- 3.1.4 Radiation monitor alarm on R-18 Liquid Waste Disposal Monitor.
- 3.1.5 Radiation monitor alarm on R-20 Spent Fuel Pit Monitor.
- 3.1.6 Radiation monitor alarm on R-21 Retention Tank Monitor.
- 3.1.7 Radiation monitor alarm on R-22 High Conductivity Waste Disposal Monitor.

3.2 Immediate Action:

- 3.2.1 Isolate the source of the release.
- 3.2.2 Obtain a sample of the effluent that was being discharged for analysis.
- 3.2.3 Sample diluted effluent in lake or creek.
- 3.2.4 Record the estimated dilution flow (for example one or two circulating pump flow) and estimated quantity of effluent.
- 3.2.5 Notify the Plant Superintendent and the Duty Engineer.

- 3.3 If lake or creek sample is $> 1 \times 10^{-7}$ uCi/cc gross activity notify authorities per SC-201 Unusual Event (Effluent Release Condition)
- 3.3.1 Notify the Health Physics Section to monitor the Ontario Water District Station water on an increased frequency.
- 3.3.2 Notify the Ontario Water District - 9-524-2941 or
9-524-8263
- 3.4 If it is determined that the release exceeded 1×10^{-6} uCi/cc gross activity, notify authorities per SC-202 Alert Effluent Release Condition)
- 3.4.1 The Plant Superintendent shall notify RG&E management.
- 3.4.2 Notify the Ontario Water District 9-524-2941 or
9-524-8263
- 3.5 If the analysis of the release is determined to have exceeded the MPC as specified in 10 CFR 20, Appendix B Table II Column 2 on a radionuclide basis, take the following actions.
- 3.5.1 Notify authorities of General emergency condition per SC-204 General Emergency (Effluent Release Conditions)
- 3.5.2 The Plant Superintendent shall observe reporting requirement of 10 CFR Sections 20.403 and 20.405.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-204

REV. NO. 0

GENERAL EMERGENCY

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodine
QC REVIEW

Frank Jones
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-204GENERAL EMERGENCY1.0 PURPOSE:

- 1.1 The purpose of this procedure is to implement the Emergency Plan for a General Emergency.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
2.2 SC-100 Event Classification

3.0 INSTRUCTIONS:

3.1 Immediate Actions

- 3.1.1 Control Room Operator Sound the "Site Evacuation Alarm" if not already sounded.
3.1.2 Use appropriate plant procedures to limit or correct condition.
3.1.3 Announce: "Attention Plant Personnel, we have a General Emergency, Emergency Response Personnel Report".
3.1.4 Shift Supervisor report to Control Room and:
- Evaluate Plant Conditions
- Direct the responses of personnel
- Assume the duties of the Emergency Coordinator until relieved.
3.1.5 Notify New York State, Wayne & Monroe Counties, and the NRC Operations Officer using SC-604 within one hour.
3.1.6 During off duty hours, activate the Emergency Response Functions using SC-604 General Emergency Notification.

3.2 SUBSEQUENT ACTIONS

- 3.2.1 Activate additional emergency response functions as necessary to respond to the event (SC-200 Emergency Response Organization).
3.2.2 Monitor plant conditions for the need to reclassify the event in accordance with SC-100 Event Classification.
3.2.3 Keep New York State, Wayne & Monroe Counties, and the NRC Operations Officer informed of significant changes in plant status.

3.3 CLOSE OUT

- 3.3.1 When the Plant has been stabilized and is in a safe condition, perform a verbal close with New York State, Wayne & Monroe Counties, and the NRC Operations Officer.
- 3.3.2 An A-25.1, or other appropriate report, will be made.
- 3.3.3 A written summary will be submitted to the NRC within 24 hours.

GINNA STATION
UNIT #1
COMPLETED

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

DATE :-

TIME :-

PROCEDURE NO. SC-205

REV. NO. 0

LOCAL RADIATION EMERGENCY

TECHNICAL REVIEW

PORC REVIEW DATE

3-24-82

JC Bedini
QC REVIEW

J. M. ...
PLANT SUPERINTENDENT

4-10-82

EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 4 PAGES

SC-205LOCAL RADIATION EMERGENCY1.0 PURPOSE:

- 1.1 To outline action required which could effect the safety of personnel within the plant in the event that a Local Radiation Emergency is indicated.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 A-1 Radiation Control Manual
- 2.3 Supplement to IE Information Notice No. 80-06, July 29, 1980.

3.0 INSTRUCTIONS:

- 3.1 The following conditions indicate a Local Radiation Emergency.
- 3.1.1 An unexplained area radiation monitor on alarm.
- 3.1.2 Report of unexpected increase in airborne activity in a work area.
- 3.1.3 Report of a radioactive spill over several square feet.
- 3.1.4 Hi flux at shutdown alarm.
- 3.1.5 It is deemed necessary by the Operator.

3.3 IMMEDIATE ACTIONS:3.3.1 Control Room Operator

Upon notification that a Local Radiation Emergency exists, the following actions should be taken.

- 3.3.1.1 Take appropriate action to limit, contain, or correct the condition. Refer to E-16.1 and E-16.2.
- 3.3.1.2 Make an appropriate announcement over the paging system that all personnel shall evacuate the affected area.

- 3.3.1.3 For evacuation of the Containment Building, sound the Containment Evacuation Alarm.
- 3.3.1.4 Notify the Shift Supervisor.
- 3.3.1.5 Notify the Health Physics Section of the incident. Request a Health Physics Technician or an Auxiliary Operator to perform a survey of affected area.
- 3.3.1.6 Notify the Security Force.

3.3.2 Shift Supervisor

- 3.3.2.1 Report to the Control Room.
- 3.3.2.2 Evaluate plant conditions and direct appropriate actions.
- 3.3.2.3 Evaluate the results of the radiation survey.
 - a. If the results of the survey show radiation or contamination levels to be normal, permit routine entry to the area. Announce over the paging system that the local radiation emergency no longer exists and that the area is cleared for routine entry.
 - b. If the results of the radiation survey show radiation or contamination levels above normal in the local area, insure that the affected area is roped off and appropriately posted as to specific radiological conditions.
- 3.3.2.4 Evaluate conditions for higher level of emergency event. Refer to SC-100.
- 3.3.2.5 Determine the cause of local radiation emergency and take appropriate steps to return condition to normal.
- 3.3.2.6 Notify the Plant Superintendent/Assistant Superintendent and Duty Engineer of the situation.
- 3.3.2.7 Have the Health Physics Technician/Auxiliary Operator monitor potentially contaminated personnel at the Decontamination area.

3.3.3 Health Physics Technician or Auxiliary Operator

Upon notification that a Local Radiation Emergency exists, the following action should be taken.

- 3.3.3.1 Perform radiation survey, personnel monitoring, and decontamination as directed by Shift Supervisor/Control Room Operator or Health Physicist.

3.3.3.2 Check sign-in sheets and make sure that all personnel in the area are accounted for.

3.3.3.3 Insure evacuated area is barricaded and properly posted.

3.3.4 Personnel in the Area

Upon notification or recognition that a Local Radiation Emergency exists:

3.3.4.1 Notify the Control Room of the conditions in the area and suspected cause of the emergency.

3.3.4.2 If possible, take steps to isolate and/or confirm the source of radiation without being subjected to unnecessary radiation exposure.

3.3.4.3 Leave the area as directed by the announced local evacuation, Health Physics personnel, Shift Supervisor, or Auxiliary Operator. Take appropriate steps while leaving the area to minimize the spread of contamination and report to the decontamination area for monitoring.

3.3.4.4 Non-Operating personnel who are not contaminated report to the Service Building Lunch Room for debriefing.

3.3.4.5 Contaminated personnel remain in the Decontamination area and proceed with decontamination.

3.3.5 Other Personnel on Site

Upon notification that a Local Radiation Emergency exists, the following actions should be taken:

3.3.5.1 Plant Superintendent, the Duty Engineer, and Health Physicist or alternates: Evaluate situation and determine course of action.

3.3.5.2 Security Force

Visitors and vehicles will not be allowed access to the protected area without the permission of the Plant Superintendent or his designee.

3.4 SUBSEQUENT ACTIONS:

- 3.4.1 The Shift Supervisor and/or the Plant Superintendent shall determine the course of action to be taken to clean up area, correct cause of accident and return area to normal operation.
- 3.4.2 When conditions return to normal notify security.
- 3.4.3 Prepare a Ginna Station Event Report (A-25.1). The Plant Operations Review Committee shall review the accident and investigate procedures to prevent its reoccurrence.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-202

REV. NO. 0

ALERT

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodine
QC REVIEW

B. J. Brown
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-202ALERT1.0 PURPOSE:

- 1.1 The purpose of this procedure is to implement the Emergency Plan for an Alert.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
2.2 SC-100 Event Classification

3.0 INSTRUCTIONS:

3.1 Immediate Actions

- 3.1.1 Control Room Operator notify the Shift Supervisor.
3.1.2 Use appropriate plant procedures to limit or correct condition.
3.1.3 Announce: "Attention Plant Personnel, we are in an Alert Condition, Emergency Response Personnel Report".
3.1.4 Shift Supervisor report to Control Room and:
- Evaluate Plant Conditions
- Direct the responses of personnel
- Assume the duties of the Emergency Coordinator until relieved.
3.1.5 Notify New York State, Wayne & Monroe Counties, and the NRC Operations Officer using SC-602 within one hour.
3.1.6 During off-duty hours activate the Emergency Response functions using SC-602, Alert Notification.

3.2 SUBSEQUENT ACTIONS

- 3.2.1 Activate additional emergency response functions as necessary to respond to the event (SC-200 Emergency Response Organization).
3.2.2 Monitor plant conditions for the need to reclassify the event in accordance with SC-100 Event Classification.
3.2.3 Keep New York State, Wayne & Monroe Counties, and the NRC Operations Officer informed of significant changes in plant status.

3.3 CLOSE OUT

- 3.3.1 When the Plant has been stabilized and is in a safe condition, perform a verbal close out with New York State, Wayne & Monroe Counties, and the NRC Operations Officer.
- 3.3.2 An A-25.1, or other appropriate report, will be made.
- 3.3.3 A written summary will be submitted to the NRC within 24 hours.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-203

REV. NO. 0

SITE EMERGENCY

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodini
QC REVIEW

Burt Smith
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-203SITE EMERGENCY1.0 PURPOSE:

- 1.1 The purpose of this procedure is to implement the Emergency Plan for a Site Emergency.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
2.2 SC-100 Event Classification

3.0 INSTRUCTIONS:

3.1 Immediate Actions

- 3.1.1 Control Room Operator Sound the "Site Evacuation Alarm".
3.1.2 Use appropriate plant procedures to limit or correct condition.
3.1.3 Announce: "Attention Plant Personnel, we have a Site Emergency, Emergency Response Personnel Report".
3.1.4 Shift Supervisor report to Control Room and:
- Evaluate Plant Conditions
- Direct the responses of personnel
- Assume the duties of the Emergency Coordinator until relieved.
3.1.5 Notify New York State, Wayne & Monroe Counties, and the NRC Operations Officer using SC-603 within one hour.
3.1.6 During off-duty hours activate the Emergency Response functions using SC-603, Site Emergency Notification.

3.2 SUBSEQUENT ACTIONS

- 3.2.1 Activate additional emergency response functions as necessary to respond to the event (SC-200 Emergency Response Organization).
3.2.2 Monitor plant conditions for the need to reclassify the event in accordance with SC-100 Event Classification.
3.2.3 Keep New York State, Wayne & Monroe Counties, and the NRC Operations Officer informed of significant changes in plant status.

3.3 CLOSE OUT

- 3.3.1 When the Plant has been stabilized and is in a safe condition, perform a verbal close out with New York State, Wayne & Monroe Counties, and the NRC Operations Officer.
- 3.3.2 An A-25.1, or other appropriate report, will be made.
- 3.3.3 A written summary will be submitted to the NRC within 24 hours.

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-323

REV. NO. 0

EMERGENCY OFF-SITE RADIATION SURVEY TEAMS

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

JCBodini
QC REVIEW

for J. M. ...
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 27 PAGES

EMERGENCYOFF-SITERADIATION SURVEY TEAMS1.0 PURPOSE:

- 1.1 The prime objective of the Emergency Off-Site Radiation Survey Teams is to rapidly survey areas downwind of the plant site in order to determine the extent and magnitude of any uncontrolled release of radioactive materials following an incident. It should be stressed that the initial off-site survey is of great importance. Decisions regarding the extent and types of protective actions required will be based upon data reported by the survey teams.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 Sc-1.7B Determination of Iodine or Particulate

3.0 INSTRUCTIONS:

- 3.1 Obtain appropriate Off-Site Survey Team footlocker as directed by Tag Board assignment. If seal is broken, use equipment list inside footlocker to inventory equipment. Request the assistance of the Survey Center Manager in obtaining replacement equipment if necessary.
- 3.2 Obtain following equipment which is not stored in footlocker.
- 3.2.1 Personnel film badge and TLD.
- 3.2.2 One full face mask and charcoal filter for each team member. Mask will be donned upon instructions of the Dose Assessment Manager.
- 3.2.3 One 0-500 mr dosimeter and one 0-5 R dosimeter for each team member. Sign-in on dosimeter log sheet.
- 3.2.4 Pack of 12 environmental TLD's from lead storage container.
- 3.2.5 Hand-held radio and magnetic mount car antenna.

- 3.2.6 RADECO H-809C Portable High Volume Air Sampler with filter holder.
- 3.2.7 RM-14 Radiation Monitor with HP-190 Probe.
- 3.2.8 Auto-Digimaster or RO-2 dose rate meter.
- 3.3 Complete the following items prior to departing on the assigned survey route.
 - 3.3.1 Check operation of radio system, portable air sampler, radiation count rate monitor, and dose rate meter using equipment check-out procedures in Appendix I.
 - 3.3.2 Obtain transportation and check vehicle for contamination by taking a swipe survey or end window survey on the horizontal surfaces with an HP-190 probe and count rate meter. If survey indicates surface contamination of more than 250 CPM above background contact the Survey Center Manager for decontamination instructions.
 - 3.3.3 Load survey equipment into vehicle, fill in Survey Team Status Board, and inform Survey Center Manager of your departure.
 - 3.3.4 Log time, date, and survey team members on survey map.
 - 3.3.5 Establish radio communications with Technical Support Center Radio Operator and advise of teams departure.
- 3.4 Perform radiation surveys using the appropriate instructions of Appendix II while following the Primary Survey Route instructions contained in Appendix III.
 - 3.4.1 At each assigned survey point the team should report the following information to the Radio Operator:
 - Location
 - Completed Actions
 - Results of Surveys
 - Departure for next Survey Point

- 3.4.2 If radio contact can not be made, report using a telephone. Call collect on one of these numbers.

315-524-4446
315-524-4984
315-524-4973
716-546-7845
716-546-4015

- 3.4.3 Upon completion of Primary Survey Route inform radio operator. The Dose Assessment Manager will assign an Alternate Survey Route or direct you to return to the Survey Center.
- 3.5 Full face masks with charcoal filters will be worn as directed by the Dose Assessment Manager. Potential internal contamination will be determined by a Whole Body Count after the survey.
- 3.6 Upon returning to the Survey Center perform a survey of team personnel for contamination. If any contamination greater than 100 CPM above background is found contact the Survey Center Manager for decontamination instructions.
- 3.6.1 Conduct a survey of the vehicle for contamination. If any contamination greater than 250 CPM above background is found contact the Survey Center Manager for decontamination instructions.
- 3.6.2 Give all filter cartridges, particulate filters, survey maps, and data records to Survey Center Manager.
- 3.6.3 Dispose of contaminated and potentially contaminated waste in an approved manner.
- 3.6.4 Re-stock, inventory, and seal Survey Team Equipment Footlocker, stow in Survey Team Room.
- 3.6.5 Return radio system, portable air sampler, radiation count rate meter, and dose rate meter to the Survey Team Room and place on charge as appropriate.
- 3.6.6 Return 0-500 mr and 0-5R dosimeters and sign-out on dosimeter log sheet.
- 3.6.7 Fill out Survey Team Status Board and inform Survey Center Manager.

A P P E N D I X I

EMERGENCY OFF-SITE RADIATION SURVEY TEAM

EQUIPMENT CHECKOUT AND OPERATION

RADIO SYSTEM

The radio system consists of a hand-held radio and magnetic mount car antenna. To checkout and operate the system, complete the following steps.

1. Ensure the vehicle roof is free of ice and snow.
2. Hold the magnetic mount antenna in the palm of your hand with the antennal wire pointed towards the rear of the vehicle and the base of the mount at an angle of about 45 degrees to the vehicle roof.
3. Position the front edge of the mount in the approximate center of vehicle roof.
4. Lower the mount onto the vehicle roof. It will be held in place by magnetic force.

***** C A U T I O N *****

DO NOT ATTEMPT TO MOVE THE ANTENNA BY SLIDING IT.
YOU WILL SCRATCH THE SURFACE OF THE VEHICLE.
ALWAYS REMOVE THE MOUNT BY LIFTING FROM THE REAR.

***** C A U T I O N *****

5. Route the antenna lead wire into the vehicle between the door jamb. With any amount of weather striping the lead should not be damaged.
6. Affix the lead wire near the head liner with a piece of tape.
7. Unscrew the telescoping or black flexible antenna from the radio and store it in the footlocker.
8. At the upper left rear corner of the radio (when viewed from the top) there is a rubber plug covering a hole marked "ANT". Remove the plug and tape it where it will not get lost.
9. Insert the jack from the mobile antenna into the hole from step 8.
10. Turn the channel selector switch to channel 1.
11. Turn the squelch knob fully CCW.

12. Turn the Volume knob CW to turn the radio on and adjust the volume level. A rushing sound should be heard.

NOTE: If no sound is heard unit is inoperable. Obtain new unit and inform Survey Center Manager).

13. Adjust squelch knob CW just enough to quite radio. If squelch knob is turned too far CW weak signals will not be heard.
14. The general procedure for communicating on the radio should be as follows.

- a) Station Called
- b) Red/Green/Orange Team
- c) Message
- d) "Over"

During a drill or exercise all fictitious data will be preceded with the words "This is a drill.....".

Examples:

"TSC, Red Team, At location number 1, Over"

"TSC, Green Team, This is a drill, Results of the general area survey at location 36 are 6,500 Counts Per Minute above background, Over"

15. To transmit depress the push-to-talk switch on the side of the radio. Speak in a normal voice into the speaker/mike.
16. To receive, release the push-to-talk switch.
17. There may be times that the TSC or EOF will be receiving communications from a team that you can not hear. If this happens the Radio Operator will tell you to wait or standby. After he has completed his traffic he will ask you to transmit your information. Remember this is one big party line; everyone can't talk at once.
18. When you have been directed to secure your Survey Team, turn the radio off, disconnect the antenna lead, install the rubber plug in the "ANT" hole, install the antenna removed in step 7, and remove the magnetic mount antenna from the vehicle by lifting up at the rear of the mount.

Place the radio in the charger located in the Survey Team Room at the Survey Center, and place the magnetic mount antenna on the bench.

RADECO H 809C HIGH VOLUME AIR SAMPLER

EQUIPMENT CHECK:

1. Ensure power switch on air sampler is off.
2. Ensure battery Charger is de-energized and in the 12 volt position.
3. Connect air sampler power cables to the battery charger, RED clip to positive and BLACK clip to negative.
4. Energize battery charger.
5. Turn power switch on air sampler on.
6. Check flow meter on air sampler. Flow meter should be off scale high with no filters in place.
7. Turn power switch on air sampler off.
8. De-energize battery charger and disconnect air sampler power cables.

EQUIPMENT OPERATION FROM VEHICLE

1. Ensure power switch on air sampler is off.
2. Connect BLACK power clip to vehicle ground (engine block, chassis, etc.) and RED power clip to positive post of vehicle battery.
3. Ensure the filter assembly contains a GY-130 Silver Zeolite cartridge and a particulate filter.
4. Turn air sampler on and record the sample date, time, location, and air flow rate (normal is 1.5 CFM) on a sample envelope.
5. Run sampler for approximately 10 minutes.
6. Record air flow rate and time.
7. Turn air sampler off.

RM-14 RADIATION SURVEY METER

EQUIPMENT CHECK:

1. Disconnect power cord from back of meter taking care not to turn test switch on.
2. Ensure that an HP-190 probe is connected to the detector jack.
3. Turn range switch to battery. Meter should read in the "BATT-OK" area.
4. Perform instrument source check.
5. Turn range switch off.

EQUIPMENT OPERATION:

1. Turn range switch to X1.
2. Place response switch in the "SLOW" position.
3. Adjust the volume control so that the audio indication (a click) can be heard.
4. The range switch should be adjusted such that the highest reading gives a mid-scale deflection.
5. All readings must be multiplied by the range switch setting (X1, X10, X100).
6. 2,200 CPM is approximately 1 mrem/hour.
7. Upon completion of the survey turn the unit off and return to the Survey Team Room. Unit should be recharged before the next use.

AUTO DIGI-MASTER DOSE METER

EQUIPMENT CHECK:

1. Turn unit on to be sure that the digital display lights.
2. Perform instrument source check.

EQUIPMENT OPERATION:

1. Allow unit to complete one cycle (display will blink) before reading when turning unit on or when radiation level changes significantly.
2. Unit will automatically change from one range to the next. The reading is always direct.
3. The Digi-Master may be used to detect the presence of Beta but cannot be used for dose measurement of Beta. Also, Beta detection is only effective when the unit is operating in the mrem/hr range.
 - a. Take a reading with the Beta window closed and record.
 - b. Take a reading with the Beta window opened and record.
 - c. If the reading with the Beta window open is greater than the reading with the Beta window closed there is Beta radiation present.
 - d. If a Beta dose rate is needed a survey with an RO-2 or equivalent instrument must be made.
4. Upon completion of the survey, turn the unit off and return to the Survey Team Room. Unit should be recharged before the next use.

RO-2 DOSE RATE METER

EQUIPMENT CHECK:

1. Turn the function selector switch to the "BATT 1" and "BATT 2" positions. Meter should indicate above the battery cut-off line.
2. Perform instrument source check.

EQUIPMENT OPERATION:

1. Zero the meter by turning the function selector switch to "ZERO" and turning the "ZERO ADJ" knob as necessary. The zero adjust may be made in a radiation field by placing the function selector switch at "ZERO ADJ".
2. To measure the radiation field, position the function selector switch to the lowest range which provides a mid-scale deflection of the meter.
3. With the Beta shield closed the meter will read the whole body Gamma dose rate.
4. To obtain a Beta dose rate measurement perform the following:

CAUTION: THE FACE OF THE BETA WINDOW IS VERY THIN.
WHENEVER THE BETA SHIELD IS OPEN GUARD THE SHIELD
AGAINST DAMAGE CONTAMINATION BY DUST OR DIRT

- a. Take an area measurement with the Beta shield closed.
 - b. Open the sliding Beta shield on the bottom of the case and take an area measurement.
 - c. Subtract the closed shield reading from the open shield reading and multiply by the Beta correction factor marked on the instrument.
 - d. This number is the Beta dose rate for that area.
5. When the survey is completed turn the function selector switch to OFF.

A P P E N D I X I I

RADIATION SURVEY INSTRUCTIONS

GENERAL AREA RADIATION SURVEY

1. A general radiation area survey should be conducted while moving between defined survey points, and at the specific survey points.
2. The survey should be conducted using an RM-14 Radiation Monitor with an HP-190 probe.
3. When conducting a moving survey the HP-190 probe should be installed in the mounting bracket and positioned outside a vehicle window. The detection window of the HP-190 probe should be horizontal and pointed to the rear of the vehicle to protect the detector from the elements and wind.
4. Vehicle speed should not exceed 15 mph during a mobile survey.
5. If the RM-14 reading changes more than 1,000 CPM stop and conduct a survey for Beta using the Auto Digi- Master or RO-2.
6. Report the results of the mobile survey to the Radio Operator at the next survey point, or after completion of the Beta survey.

SURVEY TO DETERMINE PRESENCE
OF BETA RADIATION

1. If the General Area Radiation Survey shows a change of 1000 CPM on the RM-14, or if the "plume" is suspected to be in your area, a survey to detect the presence of Beta radiation should be conducted.
2. Using and Auto Digi-Master, or RO-2 dose rate meter conduct the following surveys.
 - a. With the detector window aimed up:

Beta shield open _____

Beta shield closed _____

Difference #1 = (open reading - closed reading)
 - b. With the detector window aimed down:

Beta shield open _____

Beta shield closed _____

Difference #2 = (open reading - closed reading)
3. If either difference #1 or difference #2 from step 2 is positive this is an indication that Beta radiation is present.
 - a. If both difference #1 and #2 are positive, this is an indication that you are in the plume.
 - b. If only difference #1 is positive, this is an indication that the plume is overhead.
4. Report the results of the survey to the Radio Operator and await further instructions from the Dose Assessment Manager.

INSTALLATION OF TLD

1. Specific locations for TLD's will be listed on the survey route instructions or will be given by the Dose Assessment Manager.
2. Hammer a nail into a utility pole at the specified location. The nail should be positioned on the pole at head height and on the side closest to the site.
3. Affix a TLD to the nail using tape. Ensure the TLD window is oriented towards the site.
4. Record the location (either survey point number or road intersections), utility pole number, date, time, and TLD number on the back of the survey map.

HIGH VOLUME AIR SAMPLE

1. Draw approximately 15 cubic feet of air through a GY-130 silver zeolite cartridge and particulate filter using a RADECO H 809C High Volume air sampler. This will take approximately 10 minutes.
2. Record the sample date, time, and location (either survey point number or road intersections) on two sample envelopes, and on the back of the survey map.
3. Determine the background radiation level using the RM-14 Radiation Monitor and HP-190 probe. Record the reading on each envelope, and on the survey map. If background reading is greater than 200 CPM move to lower background prior to taking readings.
4. Using onion skins remove the GY-130 silver zeolite cartridge from the sample holder and read the activity level with the RM-14 Radiation Monitor and HP-190 probe by holding the probe window on the inlet side of the cartridge filter. DO NOT TOUCH THE PROBE WINDOW WITH THE CARTRIDGE. Record the reading on one envelope and place the cartridge in THE ENVELOPE. Record the reading on the back of the survey map.

NOTE: If cartridge is reading off scale move probe approximately 1" from cartridge. Report and log Data as being taken at 1".
5. Read the activity level of the particulate filter using the RM-14 Radiation Monitor and HP-190 probe. DO NOT TOUCH THE PROBE WINDOW WITH THE PARTICULATE FILTER. Record the reading on the other envelope and place the particulate filter in the envelope. Record the reading on the back of the survey map.
6. Remove the onion skins and discard in a plastic bag. Treat as contaminated material.
7. Report the following information to the radio Operator:
 - a. Sample location
 - b. Time sample was taken
 - c. Volume of air sample in CF
 - d. Background count rate in CPM
 - e. GY-130 silver zeolite cartridge count rate in CPM
 - f. Particulate filter count rate in CPM

NOTE: Field calculations of the airborne activity level may be performed as follows:

Iodine-131 (GY-130 Cartridge)

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (3.0 \times 10^{-9})}{(\text{Volume of Sample in Cubic Feet})} = \frac{\text{uCi/cc}}{\text{Iodine-131}}$$

Particulate

$$\frac{(\text{CPM Sample} - \text{CPM Background}) (8.38 \times 10^{-10})}{(\text{Volume of Sample in Cubic Feet})} = \frac{\text{uCi/cc}}{\text{Particulate}}$$

CHANGING FILTERS AT FIXED ENVIRONMENTAL STATIONS

1. Record the following information on the sample envelope left from the previous filter change:
 - a. Date
 - b. Time
 - c. System Vacuum (inches)
 - d. Gasmeter reading (cubic feet)
 - e. Total hour meter (record in column marked "OFF")
2. Turn pump off
3. Using onion skins remove the filter holder at the quick disconnect joint.
4. Unscrew the outside retaining ring and remove the particulate filter from the holder and place in the sample envelope.
5. If a charcoal cartridge was in use transfer the information on the particulate filter envelope to a new envelope and place the charcoal cartridge in the envelope.
6. Place the new GY-130 silver zeolite cartridge in the sample head.
7. Place a new particulate filter in the holder, replace the retaining ring and reconnect holder to the pump at the quick disconnect joint.
8. Remove onion skins and place in a plastic bag. Treat as contaminated.
9. Turn the pump on.
10. Record the following information on two new envelopes. Mark one envelope "GY-130 silver zeolite".
 - a. Station number
 - b. Date
 - c. Time
 - d. System vacuum (inches)
 - e. Gasmeter reading (cubic feet)
 - f. Total Hour meter (record in the "ON" column)
11. Place the new envelopes inside the monitor cabinet.
12. Bring the envelopes containing the cartridge/filter removed to the Survey Center at the completion of your assigned route or when directed by the Dose Assessment Manager.

A P P E N D I X 111

OFF SITE RADIATION SURVEY TEAM INSTRUCTION

RED TEAM

PRIMARY SURVEY ROUTE

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the Training Center driveway travel east on Lake Road to Knickerbocker Road (1.1 miles). Place a TLD near the intersection of Lake Road and Knickerbocker Road (#1).
2. Go south on Knickerbocker Road to Brick Church Road (1.0 miles). Place a TLD near the intersection of Knickerbocker Road and Brick Church Road (#2).
3. Continue south on Knickerbocker Road to Kenyon Road (1.3 miles). Take a high volume air sample at the intersection of Knickerbocker Road and Kenyon Road (#9).
4. Go west on Kenyon Road to Slocum Road (1.9 miles).
5. Go north on Slocum Road to Brick Church Road (1.3 miles). Place a TLD near the intersection of Slocum Road and Brick Church Road (#4).
6. Continue north on Slocum Road to Lake Road (1.0 miles).
7. Report to Radio Operator for further instructions.

RED TEAM

SECONDARY SURVEY ROUTE

(WEST OR NORTHWEST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the intersection of Lake and Slocum Road.
2. Go south on Slocum Road to State Route 104 (3.1 miles)
3. Go east on State Route 104 to state Route 350/Ontario Center Road (1.0 miles).
4. Go south on State Route 350 to State Route 441/Walworth Road (6.3 miles).
5. Go east on State Route 441/Walworth Road to main intersection in Village of Walworth (Walworth-Ontario Road, 1.0 miles). Place a TLD near the intersection (#26).
6. Report to the Radio Operator for further instructions.

RED TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From the intersection of Lake and Slocum Road.
2. Go south on Slocum Road to Route 104 (3.1 miles).
3. Go east on Route 104 to Route 350/Ontario Center Road (1.0 miles).
4. Go south on Route 350 to Plank Road (3.2 miles).
5. Go west on Plank Road to County Line Road (4.1 miles). Place a TLD near the intersection of Plank Road and County Line Road (#46).
6. Continue west on Plank Road to Salt Road (1.5 miles). Place a TLD near the intersections of Plank Road and Salt Road (#39).
7. Go north on Salt Road to Schlegel Road (4.1 miles). Place a TLD near the intersection of Salt Road and Schlegel Road (#42).
8. Report to Radio operator for further instructions.

GREEN TEAM

PRIMARY SURVEY ROUTE

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. Travel west on Lake Road to Lakeside Road (1.7 miles). Place a TLD near the intersection of Lake Road and Lakeside Road (#17).
2. Go south on Lakeside Road to Boston Road (1.0 miles). Take a high volume air sample near the intersection of Lakeside Road and Boston Road (#16).
3. Continue south on Lakeside Road to Route 104 (2.0 miles).
4. Go east on Route 104 to Ontario Center Road (1.6 miles).
5. Go north on Ontario Center Road to Brick Church Road (2.1 miles). Place a TLD near the intersection of Ontario Center Road and Brick Church Road (#3).
6. Continue north to Lake Road.
7. Report to Radio Operator for further instructions.

GREEN TEAM

SECONDARY SURVEY ROUTE

(WEST OR NORTHWEST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Ontario Center Road, go east to Pultneyville (7.0 miles). Place a TLD in the Pultneyville area (#28) near white settler monument at the Lake.
2. Go south from Pultneyville on Route 21 to Pound Road (3.4 miles). Place a TLD along Route 21 south of Pound Road (#48).
3. Continue south on Route 21 to Farnsworth Road (4.6 miles). Place a TLD near the intersection of Route 21 and Farnsworth Road (#47).
4. Continue south on Route 21 and into the Village of Marion (3.0 miles).
5. Return to Main Street in the Village of Williamson on Route 21 (5.3 miles). Turn left onto Main Street and then left into driveway about 300' from intersection leading to substation #207 behind business buildings.

Using the RG&E substation key enter the substation and change the filter cartridge on environmental monitor #11.

6. Report to Radio Operator for further instructions.

GREEN TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road and Ontario Center Road, go west to Route 250. Place a TLD near intersection of Lake Road and Route 250 (#45) (6.0 miles).
2. Continue west on Lake Road to Whiting Road (1.8 miles).
3. Go south on Whiting Road to Klem Road (1.8 miles).
4. Go west on Klem Road to Five Mile Line Road (0.4 miles).
5. Go south on Five Mile Line Road to Plank Road (3.4 miles). Place a TLD near the intersection of Five Mile Line Road and Plank Road (#51).
6. Continue south on Five Mile Line Road to Penfield Four Corners (intersection with Penfield Road, Route 441) (3.6 miles). Place a TLD near back of Baptist Church parking lot, 500' east of intersection on north side of Penfield Road. (#41)
7. Report to Radio Operator for further instructions.

ORANGE TEAMS

PRIMARY SURVEY ROUTE

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. Travel east on Lake Road to Fisher Road (2.7 miles).
2. Go south on Fisher Road to Shepherd Road (0.7 miles). Take an air sample near the intersection of Fisher Road and Shepherd Road (#19).
3. Place a TLD near the intersection of Fisher Road and Shepherd Road (#19).
4. Continue south on Fisher Road to Trimble Road (1.1 miles). Place a TLD near the intersection of Fisher Road and Trimble Road (#20).
5. Continue south on Fisher Road to Kenyon Road (0.7 miles). Go west on Kenyon Road to Furnace Road (1.1 miles). Place a TLD near the intersection of Kenyon Road and Furnace Road (#49).
6. Go north on Furnace Road to Lake Road (2.7 miles) and radio operator for further direction.

ORANGE TEAM

SECONDARY SURVEY ROUTE

(WEST OR NORTHWEST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Furnace Road, go south to Ridge Road. (4.2 miles)
2. Go south on Walworth-Ontario Road to Trummonds Road (2.3 miles).
3. Go east on Trummonds Road to Arbor Road (1.1 miles). Place a TLD near the intersection of Trummonds Road and Arbor Road (#22).
4. Go north on Arbor Road to Ridge Road (2.3 miles).
5. Go east on Ridge Road to Eddy Ridge Road (2.2 miles). Place a TLD near the intersection of Ridge Road and Eddy Ridge Road. (#52)
6. Continue east on Ridge Road to Tuckahoe Road (0.3 miles).
7. Go north on Tuckahoe Road to Salmon Creek Road (2.5 miles). Place a TLD near the intersection of Tuckahoe Road and Salmon Creek Road. (#53)
8. Report to Radio Operator for further instructions.

ORANGE TEAM

SECONDARY SURVEY ROUTE

(EAST OR NORTHEAST WINDS)

INSTRUCTIONS

NOTE: Numbers given in parentheses are predesignated survey points. Mileages given are approximate.

1. From Lake Road & Furnace Road, go west on Lake Road to Roder Parkway (access road to Ontario on the Lake) (5.1 miles). Go north on Roder Parkway to intersection with Ontario Drive and place TLD near intersection (#18) (0.5 miles).
2. Return to Lake Road, continue west to County Line Road (2.4 miles).
3. Go south on County Line Road to Berg/Schlegel Road (2.0 miles). Place a TLD near the intersection of County Line Road and Berg/Schlegel Road (#36).
4. Continue south on County Line Road to Route 104 (1.2 miles). Turn right onto Route 104 and go to Salt Road (1.2 miles). Turn left onto Salt Road to State Road (1.1 miles).
5. Go west on State Road to Route 250 (2.8 miles). Place a TLD at the intersection of State Road and Route 250 (#38).
6. Go south on Route 250 to Plank Road (1.2 miles).
7. Go west on Plank Road to RG&E Eastern Monroe Service Center, 1270 Plank Road. Report results of surveys to radio operator.
8. Return to Route 250 and go north to Main Street in the Village of Webster (2.3 miles).
9. Go east on Main Street to Phillips Road (0.6 miles).
10. Go north on Phillips Road to substation #74 driveway which is 20' north of access road to Route 104.
11. Using the special substation key, change the filter cartridge at environmental monitor #9 located in the substation.
12. Report to Radio Operator for instructions.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-200

REV. NO. 0

EMERGENCY RESPONSE ORGANIZATION/RESPONSIBILITIES

TECHNICAL REVIEW

PORC REVIEW DATE

4-14-82

J. C. Bodini
QC REVIEW

Bruce Adams
PLANT SUPERINTENDENT

4-17-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 43 PAGES

SC-200EMERGENCY RESPONSE ORGANIZATION/RESPONSIBILITIES1.0 PURPOSE:

- 1.1 The purpose of this procedure is to provide a method to define and implement Emergency Response Organization. The functions and responsibilities of each position are also defined.

2.0 REFERENCES:

- 2.1 SC-1
2.2 SC-1.1A
2.3 10 CFR 50 APPENDIX E
2.4 NUREG-0654, Revision 1
2.5 NUREG-0690, Final Report

3.0 INSTRUCTIONS:

- 3.1 The Emergency Response Organizations defined in Appendix I represent the minimum level of activation that will be initiated for each of the levels of Emergency Classification defined in SC-200, Ginna Station Event Evaluation and Classification.
- 3.2 The Shift Supervisor, or Emergency Coordinator, will activate the minimum required organization, as follows:
- 3.2.1 Unusual Event- the organization defined in Fig 2 which is the normal Control Room organization will respond to an Unusual Event per procedure SC-201. The Shift Supervisor has the position and authority of Emergency Coordinator until relieved by plant Supt. or alternate.
- 3.2.2 ALERT the organization defined in Fig 3 is the Technical Support Center organization. At this level the Shift Supervisor reports to the Plant Operations Assessment Manager.

- 3.2.3 Site or General Emergency - The organization defined in Fig 4 and the sub group figures are activated. The Emergency Coordinator reports to the EOF/Recovery Center through the Nuclear Operations Manager.
- 3.3 The Shift Supervisor, or Emergency Coordinator, may activate additional Emergency Response Organizations if he deems them necessary to assess, mitigate, or recover from the incident.
- 3.4 Classification of an incident is a function of the plant condition and not the organizations that have been activated.
- 3.5 The functions and responsibilities of the various positions which make up the emergency organizations are shown in Appendix II.

A P P E N D I X I

EMERGENCY RESPONSE ORGANIZATION CHARTS

SYMBOL DEFINITION



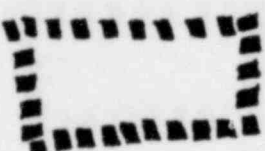
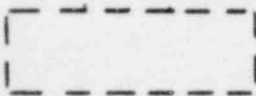

1.  Indicates a line of supervision and communication.
2.  Indicates a line of communication only.
3.  Indicates a defined Emergency Response Facility function which will be activated for the identified Emergency Classification.
4.  Indicates a defined Emergency Response Facility function which may be activated by the Emergency Coordinator if it is deemed necessary.
5.  Indicates a function which is not under the control of the Rochester Gas & Electric Corporation. Such functions are shown only for clarity and to indicate lines of communications.

FIG 1.

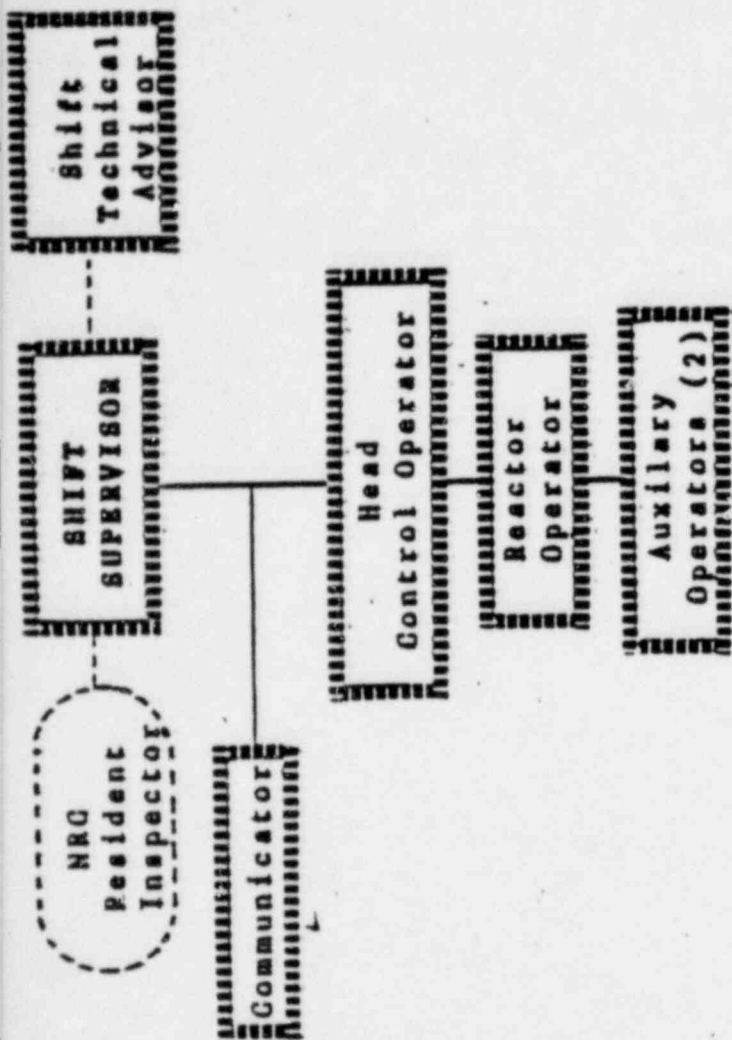


Figure 2

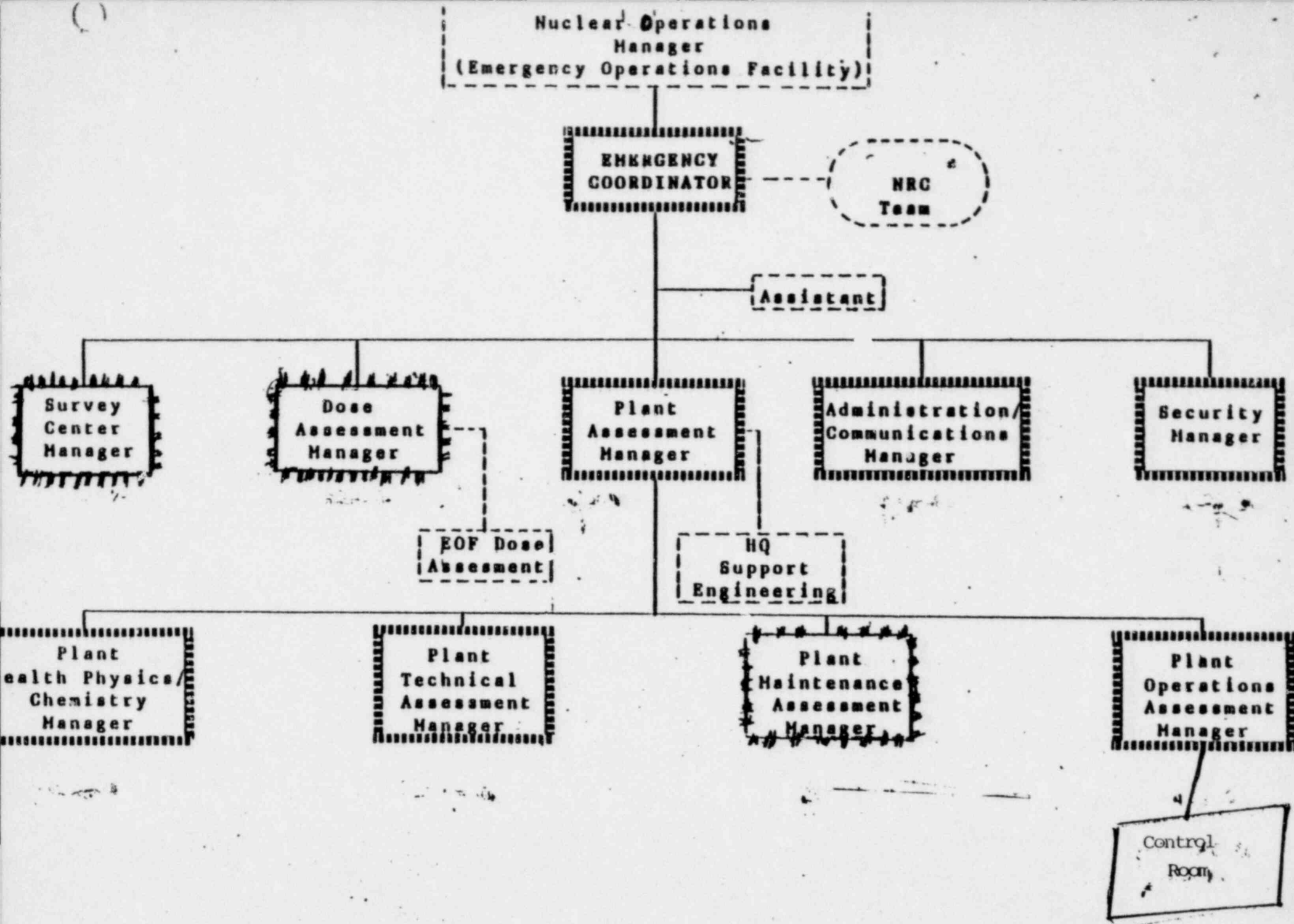


Figure 3

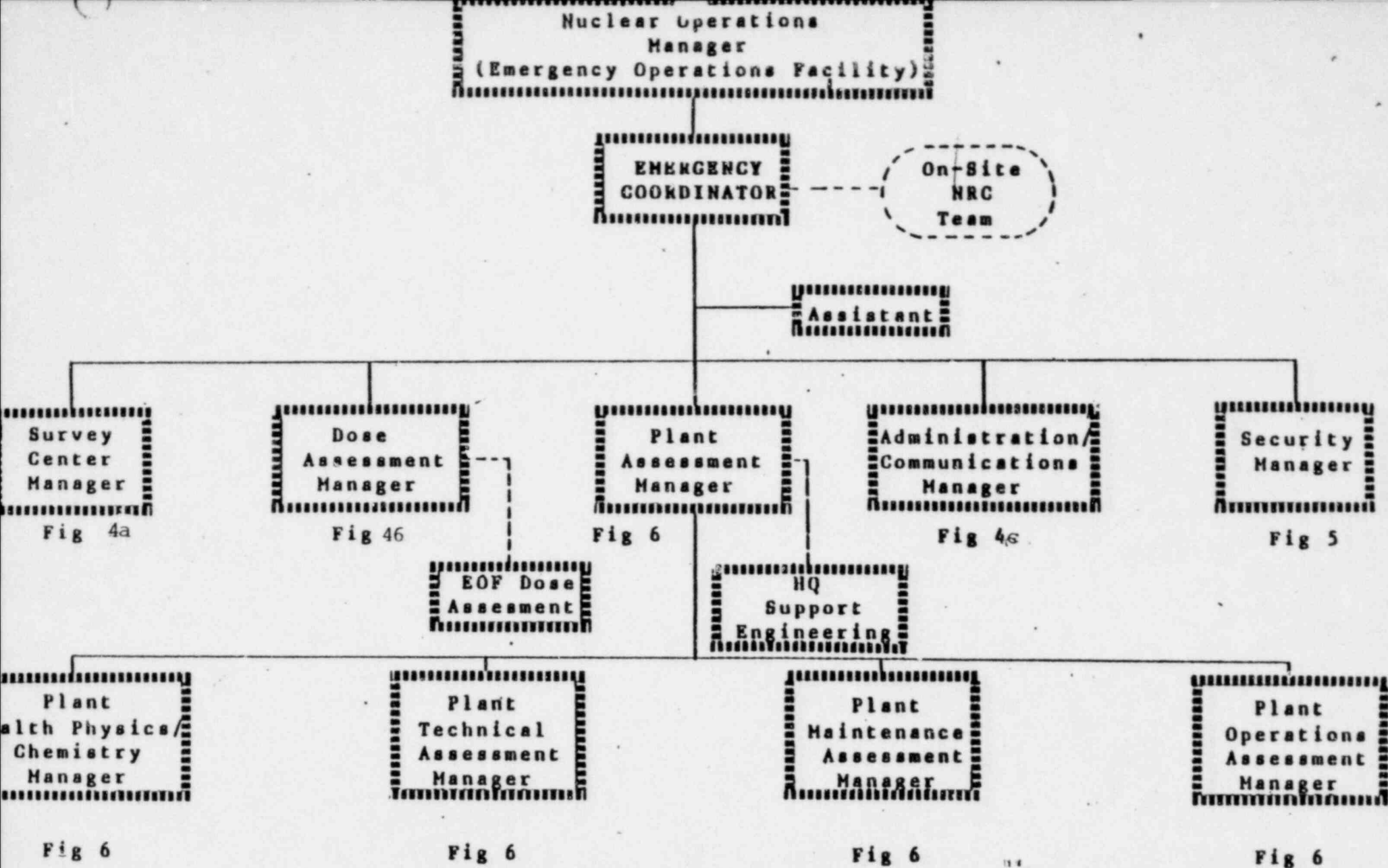


Figure 4

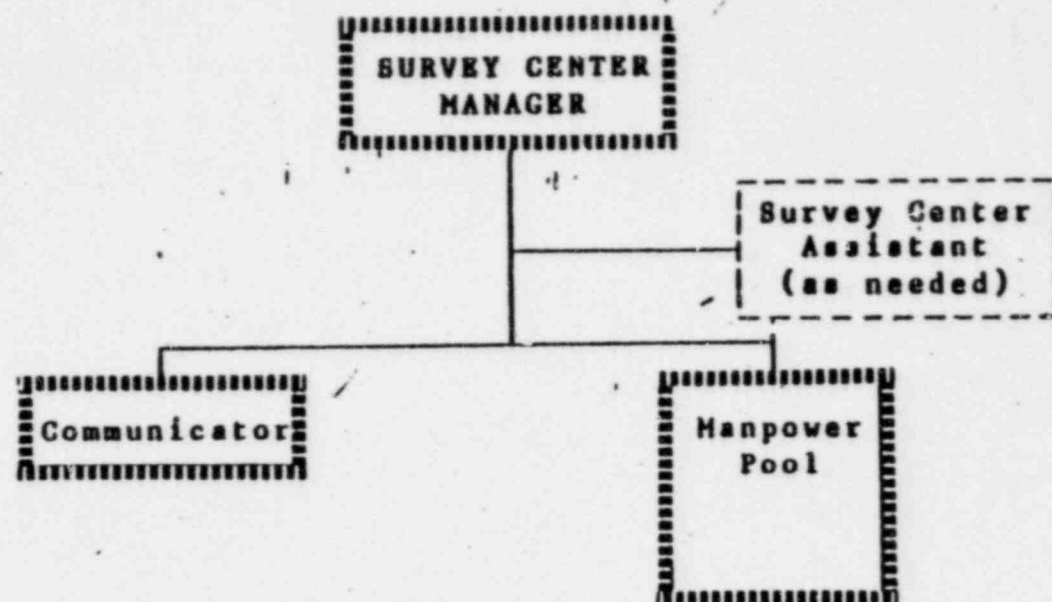


Figure 4a

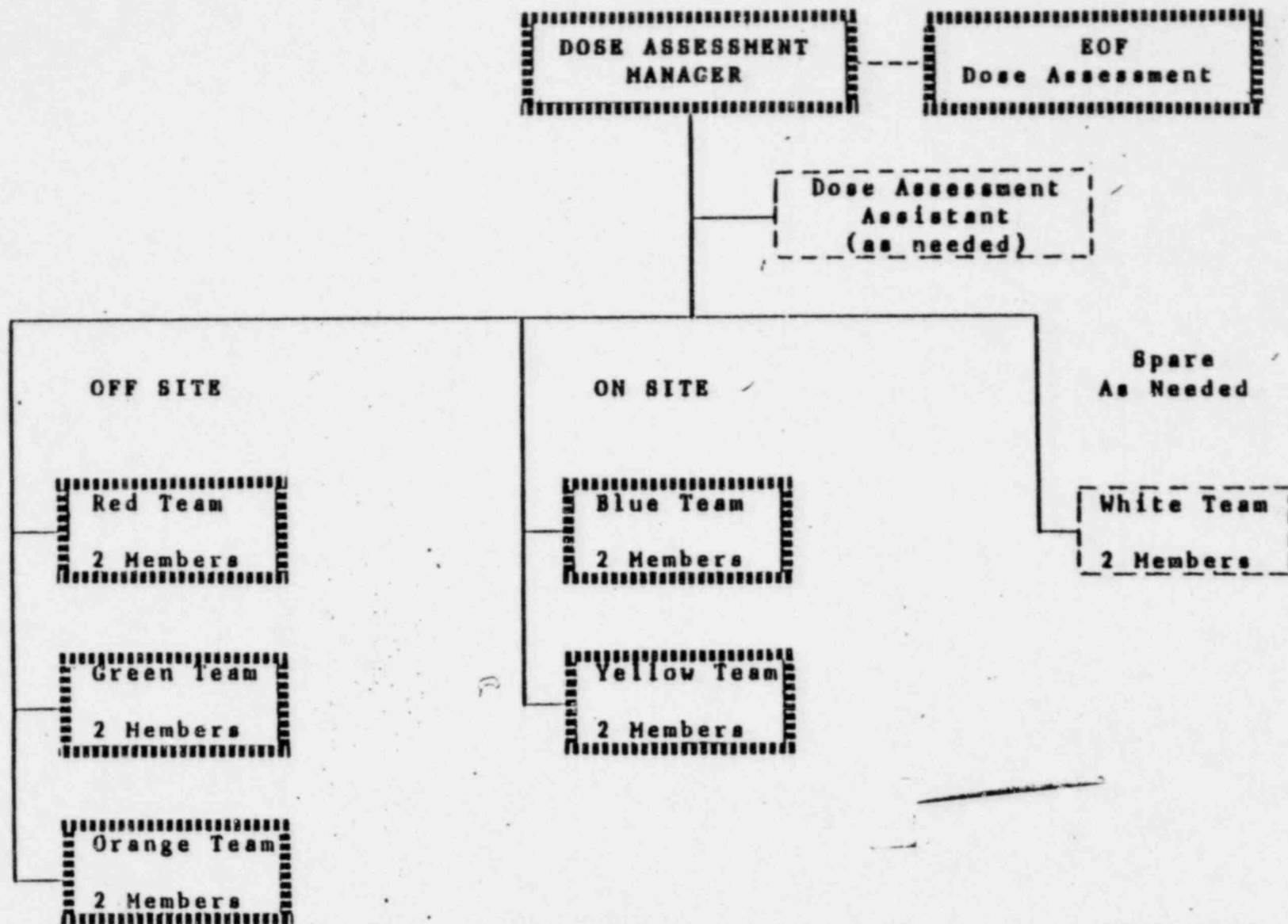


Figure 4b



Figure 4 C

SECURITY
MANAGER

See R.E. Ginna
Facility Security Plan

Figure 5

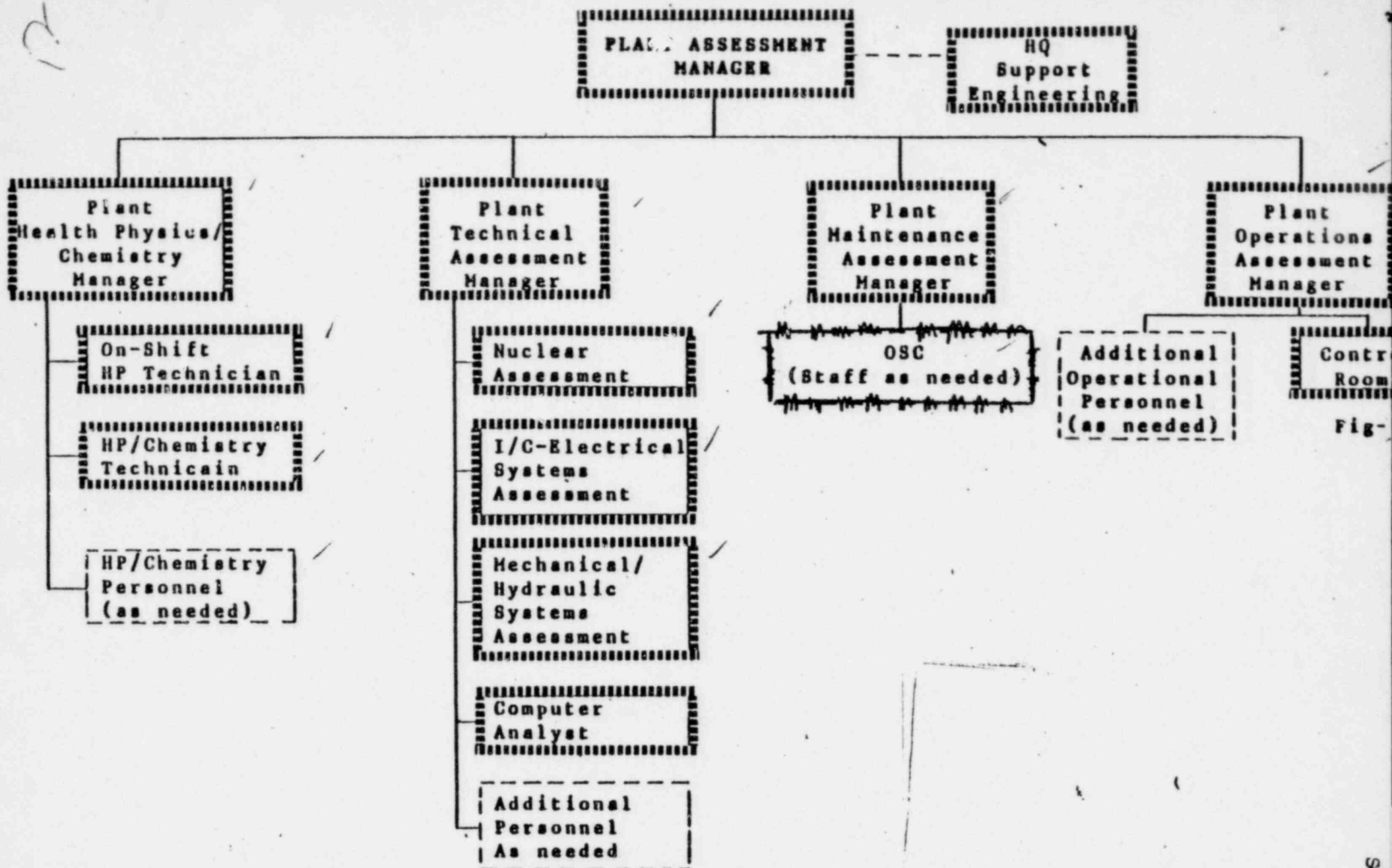


Fig-

Figure 6

A P P E N D I X I I

EMERGENCY POSITIONS - FUNCTIONS AND RESPONSIBILITIES

Emergency Coordinator - Shift Supervisor and Assistant Emergency Coordinator reports to Superintendent of Nuclear Protection.

Supervises - All personnel involved in emergency response

Function - To supervise and direct all actions necessary to protect the public from an emergency at Ginna Station

Responsibilities -

- Assume responsibility of the emergency until relieved
- Ensure communications are established among emergency center for alert or above
- Request completed plant status form(s) per SC-700
- Ensure completed plant status form(s) are reported to appropriate agencies and emergency centers per SC-700
- Ensure dose assessment evaluating conditions for alert level or above
- Ensure TSC and OSC activated for alert or above
- Ensure Survey Teams Dispatched for alert or above
- Ensure accountability has commenced for site Emergency or above
- Ensure Health Physics/Chemistry Manager is informed on additional doses.
- Based on accountability institute search and rescue SC() or medical plan (A-7)
- Monitor plant conditions for need to reclassify the event
- Keep appropriate agencies and emergency centers updated as to dose projection and plant status
- Activate additional emergency response functions as necessary to respond to the event
- Dispatch designated individuals to county EOC's, EOF for site emergency or above.
- Ensure nonessential personnel and vehicals are surveyed decontaminated if necessary prior to sending them home

- Send non-essential personnel home by safest route and advise Sheriff of evacuation route
- Ensure post accident recovery plans are developed
- Ensure the transfer of Emergency Coordinator and TSC functions are mutually acceptable to all involved personnel. Ensure all involved staff members are aware of transfer of function

SHIFT TECHNICAL ADVISOR

Reports To: Shift Supervisor

Supervises: NA

Function: Provides the capability to reorganize and design unusual events and assist in accident assessment. The STA compliments the control manipulation and operations management of shift control room personnel.

- Responsibilities:
1. Advise the Shift Supervisor upon reorganization and/or diagnosis of unusual events
 2. Provide perspective in assessment of plant conditions and actions to be taken for safety of the plant.
 3. Advise the Control Room operators on actions to terminate or mitigate the consequences of unusual incidents, and remain detached from manipulation of controls and supervision of operations.
 4. Recognize and respond to multiple equipment failures, operator errors, complex transient responses, inadequate core cooling and essential parameters that indicate the status of the core and primary coolant boundaries.

CONTROL ROOM COMMUNICATOR

Reports To: Shift Supervisor

Supervises: NA

Function: Provide communication assistance for the Shift Supervisor during emergency situations

Responsibilities: 1. As directed by the Shift Supervisor make appropriate notifications.

2. Establish communication link to TSC when manned.

HEAD CONTROL OPERATOR AND/OR REACTOR OPERATOR

Reports To: Shift Supervisor

Supervises: Auxiliary Operators as related to plant operations

Function: To cope with emergency in a safe and controlled manor

Responsibilities:

1. Use appropriate plant procedures to limit or correct condition.
2. Place Control Room ventilation in recirculators mode during Site Emergency or higher.
3. Check outside air damper control at 0 psig (located in kitchen) for Site Emergency or higher
4. Assure calls from plant guards answered until TSC manned.

AUXILIARY OPERATOR

Reports To: Shift Supervisor

Supervises NA

Function: To assist the Shift Supervisor during emergency situations

Responsibilities: Perform plant operations as requested by the Control Room Operators or Shift Supervisor

Fill out evaluation form SC-600 at request of Shift Supervisor

Perform in plant survey at request of Shift Supervisor

ADMINISTRATION/COMMUNICATIONS MANAGER

Reports To: Emergency Coordinator

Supervises: Administration and Communications Personnel assigned to the TSC and OSC.

Function: Provide and coordinate administrative and communications support during operation of the Technical and Operations Support Center.

Responsibilities:

1. Direct and monitor the operation and usage of plant phone facilities to ensure optimum phone communications.
2. Direct and monitor the operation and usage of the radio station in the TSC to ensure optimum radio communications.
3. Direct the monitor the receipt and distribution of speed letters in the Technical and Operational Support Center.
4. With the concurrence of the Emergency Coordinator obtain and direct additional administrative/communication support personnel as necessary.
5. Obtain the names of on-shift personnel, personnel located in the Control Room, TSC, OCS and provide to the Survey Center Manager for personnel accountability.
6. Obtain the Site Emergency Call list SC-605 status and assume responsibility for completing the call from Electric Line Operating

71-2582

7. Direct the call in of additional personnel as directed by the Emergency Coordinator per SC-600.

SWITCHBOARD OPERATOR

Reports To: Administration/Communications Manager

Supervises: NA

Function: Operate the plant phone switchboard.

Responsibilities:

1. Operate the plant phone switchboard to route incoming calls as directed by the Administration Communications Manager.
2. Operate the plant phone switchboard to provide routes for outgoing phone communications.
3. Document all incoming and outgoing messages on speed letters.

RADIO OPERATOR

Reports To: Administration/Communications Manager

Supervises: NA

Function: Operate the TSC radio.

Responsibilities:

1. Operate the TSC radio to establish and maintain communications with the survey teams as directed by the Administration/Communications Manager.
2. Establish and maintain radio communications with other Emergency Plan Organizations as directed by the Administration/Communications Manager.
3. Document all incoming and outgoing messages on speed letters.

MESSENGERS

Reports To: Administration/Communications Manager

Supervises: NA

Function: Distribute messages in the TSC and OSC.

Responsibilities:

1. Provide timely distribution of incoming messages from the switchboard or radio operators to designated addresses.
2. Provide timely transfer of outgoing messages from originators to the switchboard or radio operators as appropriate.
3. Perform other duties as assigned by the Administration/Communications Manager.

COMMUNICATORS

Reports To: Administration/Communications Manager

Supervises: NA

Function: Provide communications assistance.

Responsibilities: 1. Provide communications assistance as directed by the Administration/Communications Manager.

2. Perform other duties as assigned by the Administration/Communications Manager.

CLERK/TYPISTS (AS NEEDED)

Reports To: Administration/Communications Manager

Supervises: NA

Function: Provide clerical support.

Responsibilities:

1. Provide clerical support as directed by the Administration/Communications Manager.
2. Perform other Duties as assigned by the Administration/Communications Manager.

SECURITY MANAGER

Reports To: Emergency Coordinator

Supervises: Site Security

Function: Maintain the physical security of the R.E.Ginna site.

Responsibilities:

1. Direct the R.E.Ginna Security force as necessary to maintain the physical security of the site.
2. Keep the Emergency Coordinator informed of situations which may require the reinforcement of the security force to maintain site security.

PLANT ASSESSMENT MANAGER

Reports To: Emergency Coordinator

Supervises: Plant Assessment Groups

Function: Coordinate the actions of the plant assessment groups and provide information to the Emergency Coordinator concerning accident assessment, mitigation and recovery.

Responsibilities:

1. Coordinate the functions of the plant assessment groups.
2. Interface with other elements of the Emergency Plan Organization & Head Quarters Support Group in obtaining and providing information to assess the plant condition.
3. Advise the Emergency Coordinator on accident assessment, mitigation and recovery.
4. Provide recommendations to the Emergency Coordinator for plant operations to mitigate the accident and recover the plant.

OPERATION SUPPORT CENTER ASSIGNEES

Reports To: Plant Maintenance Assessment Manager

Supervises: NA

Function: To repair and evaluate problems related to recovery effort during emergency and perform other duties as requested by Plant Maintenance Assessment Manager.

Responsibilities:

1. Assure all OSC personnel are logged in on TSC Magnetic organization chart.
2. Assess manpower needs for repair functions.
3. Repair equipment as necessary.
4. Verify habitability of OSC and report results to Plant Maintenance Assessment Manager.
5. Provide In-Plant Surveys as requested.
6. Provide Search and Rescue as requested.

PLANT MAINTENANCE ASSESSMENT MANAGER

Reports To: Plant Assessment Manager

Supervises: Operations Support Center Personnel

Function: Direct and coordinate the repair efforts for the plant utilizing the "Manpower Pool" as the Survey Center and off-site personnel.

Responsibilities:

1. In charge of the Operational Support Center personnel and activities.
2. Direct and coordinate repairs to plant equipment.
3. Direct and coordinate the establishment of temporary emergency connections.
4. Direct and coordinate search and rescue efforts as necessary.
5. Provide and coordinate first aid personnel as necessary.
6. Obtain and coordinate personnel from the "Manpower Pool" and off-site to support accident mitigation and recovery as necessary.

DOSE ASSESSMENT MANAGER

Reports To: Emergency Coordinator

Supervises: Off-site and on-site survey teams

Function: Direct the collection and radiological data by survey teams and the reduction of the data to compute dose assessments for use by the Emergency Coordinator and his staff.

Responsibilities:

1. Direct the collection of radiological data survey teams.
2. Evaluate and reduce data collected by the survey teams and in-plant monitoring to obtain dose assessments.
3. Report results of dose assessment and recommendations for personnel protection to Emergency Coordinator.
4. Perform duties as assigned by Emergency Coordinator in EOF assumes Dose Assessment Responsibility.
5. Initiate communications with the NRC using the Health Physics Network (HPN) phone or alternate methods.

DOSE ASSESSMENT ASSISTANT(AS NEEDED)

Reports To: Dose Assessment Manager

Supervises: As directed by Dose Assessment Manager

Function: Assist the Dose Assessment Manager in the execution of his responsibilities.

Responsibilities: 1. Assist the Dose Assessment Manager as directed.

OFF-SITE SURVEY TEAMS
ON-SITE SURVEY TEAMS
SPARE SURVEY TEAMS

Reports To: Dose Assessment Manager

Supervises: NA

Function: Collect and report radiological data as directed by procedure and the Dose Assessment Manager.

Responsibilities:

1. Obtain Tag from Emergency Survey Center Tag Board.
2. Obtain survey team equipment and proceed as directed by procedure and the Survey Center Manager.
3. Establish and maintain communications with the Dose Assessment Manager using established procedure.
4. Collect and report radiological data as requested by the Dose Assessment Manager.

PLANT HP/CHEMISTRY MANAGER

Reports To: Plant Assessment Manager

Supervises: On-Shift HPT, HP/Chemistry Personnel as assigned

Function: Provide assessment of plant radiological and chemistry situation.

Responsibilities:

1. Direct the collection and analysis of Primary and Secondary samples as required.
2. Direct the collection and analysis of effluent samples as required.
3. Direct the in-plant radiation surveys as required.
4. Provide Health Physics coverage as required.
5. Provide personnel monitoring and decontamination as required.
6. Direct the maintenance of personnel dosimetry records.
7. Provide results of analysis and assessments to Plant Assessment Manager and other plant assessment groups.

ON-SHIFT HP TECHNICIAN

Reports To: Shift Supervisor

Supervises: NA

Function: Provide radiological assistance to the Shift Supervisor during emergency situation

Responsibilities:

1. Check Control Room radiation emergency equipment.
2. Check Control Room air sampler.
3. Check lake for boater.
4. Report names of all personnel in Control Room to TSC Administrative/Communication Manager.
5. Assist in-plant Survey Teams as directed by Shift Supervisor.
6. Assist Shift Supervisor.

HP/CHEMISTRY PERSONNEL

Reports To: HP/Chemistry Assessment Manager

Supervises: As Assigned

Function Provide Health Physics/Chemistry support.

Responsibilities: 1. Perform Health Physics/Chemistry and support as directed by the HP/Chemistry Assessment Manager.

PLANT TECHNICAL ASSESSMENT MANAGER

Reports to: Plant Assessment Manager

Supervises: Plant Technical Assessment Group

Function: Direct the assessment of core physics and plant conditions. Identify and recommend steps to mitigate the accident and recover the plant. Develop abnormal procedures as needed.

Responsibilities:

1. Assess the conditions of the core and the status of core cooling capabilities.
2. Assess plant conditions with respect to the availability of equipment, systems, electrical power and water inventory.
3. Identify and recommend steps to mitigate the accident.
4. Recommend steps to recover the plant.
5. Develop abnormal procedures to support accident mitigation and plant recovery as necessary.

NUCLEAR ASSESSMENT ENGINEER

Reports To: Plant Technical Assessment Manager

Supervises: NA

Functions: Assist the Plant Technical Manager in assessing the core conditions and recommending future plant actions.

Responsibilities:

1. Obtain and evaluate data concerning core conditions and adequacy of core cooling.
2. Provide assessments and recommendations to the Plant Technical Assessment Manager with regards to current and future core conditions.
3. Assist the Plant Technical Assessment Manager in the mitigation of the accident and recovery.

I & C - ELECTRICAL SYSTEMS ASSESSMENT ENGINEER

Reports To: Plant Technical Assessment Manager

Supervises: NA

Function: Assist the Plant Technical Assessment Manager in assessing the condition of the I & C and Electrical systems and recommending future plant actions.

Responsibilities:

1. Obtain and evaluate data associated with the I & C and Electrical systems.
2. Provide assessments and recommendations to the Plant Technical Assessment Manager with regards to the operation and utilization of the I & C and Electrical systems.
3. Assist the Plant Technical Assessment Manager in the mitigation of the accident and recovery.

MECHANICAL/HYDRAULIC SYSTEMS ASSESSMENT ENGINEER

Reports To: Plant Technical Assessment Manager

Supervises: NA

Function: Assist the Plant Technical Assessment Manager in assessing the condition of the Mechanical/Hydraulic Systems concerns and recommending future plant actions.

Responsibilities:

1. Obtain and evaluate data associated with the Mechanical/Hydraulic Systems aspects of the plant.
2. Provide assessments and recommendations to the Plant Technical Assessment Manager with regards to the operation and utilization of the Mechanical/Hydraulic Systems.
3. Assist the Plant Technical Assessment Manager in the mitigation of the accident and recovery.

PLANT OPERATIONS ASSESSMENT MANAGERS

Reports To: Plant Assessment Manager

Supervises: On-Shift Personnel and Standby Operations Personnel

Function: Direct and coordinate operations personnel in accident confirmation, mitigation and recovery.

Responsibilities:

1. Direct and coordinate the efforts of Operations personnel in confirmation of the accident identification.
2. Direct and coordinate the efforts of Operations personnel to mitigate the accident.
3. Direct and coordinate the efforts of Operations personnel in recovery from the accident.
4. Obtain and coordinate the utilization of Operations personnel from the "Manpower Pool" at the training center.
5. Provide and coordinate personnel in response to fires.

SURVEY CENTER MANAGER

Reports To: Emergency Coordinator

Supervises: Personnel located in the Survey Center

Function: Coordinate utilization of personnel located in the Survey Center.

Responsibilities:

1. Coordinate personnel accountability at the Survey Center during a site evacuation and report results to Emergency Coordinator.
2. Insure that survey teams are properly staffed and dispatched as rapidly as possible and report status to Dose Assessment Manager.
3. Conduct radiation survey of Survey Center and report results to Emergency Coordinator.
4. Assign and dispatch personnel from the "manpower Pool" located in the Survey Center auditorium as directed by the Emergency Coordinator.
5. Coordinate the radiation monitoring and decontamination of personnel and vehicles arriving and leaving the Survey Center as necessary.

SURVEY CENTER ASSISTANT(AS NEEDED)

Reports To: Survey Center Manager

Supervises: As directed by SCM

Function: Assist the Survey Center Manager in execution of his responsibilities.

Responsibilities: 1. Assist as directed by the Survey Center Manager.

SURVEY CENTER COMMUNICATOR

Reports To: Survey Center Manager

Supervises: NA

Function: Provide communications for Survey Center Manager.

Responsibilities:

1. Rapidly and accurately transmit information as directed by the Survey Center Manager.
2. Rapidly and accurately inform the Survey Center Manager of communications from other Emergency Plan organizations.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-110

REV. NO. 0

GINNA STATION EVENT EVALUATION FOR REDUCING THE CLASSIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

J. Bodini
QC REVIEW

J. Moon
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-110GINNA STATION EVENT EVALUATION FORREDUCING THE CLASSIFICATION1.0 PURPOSE:

- 1.1 Provide a method for reducing the event classification and terminating the emergency response plan.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-100 Ginna Event Evaluation and Classification

3.0 INSTRUCTIONS:

- 3.1 Events and plant conditions shall be reviewed by the Emergency Coordinator regularly to determine the need to reclassifying the emergency level.
- 3.2 The Emergency Coordinator in concurrence with his staff and the next higher level emergency organization director ie:

1. Emergency Coordinator - Shift Supervisor - Concurrence Plant Superintendent
2. Emergency Coordinator - Plant Superintendent - Concurrence VP of Electric and Steam Production

Shall declare a prediction of the emergency classification level based on:

- 3.2.1 The plant is stable and in a controllable condition.
- 3.2.2 The plant is not releasing radioactivity such that it will effect the population around the plant.
- 3.2.3 The staff does not anticipate a significant change in plant status which could require reinitiating the present emergency response level.
- 3.2.4 Available data does not indicate that reducing the event classification will have effect on general population.
- 3.2.5 Conditions for present emergency classification level no longer exists as determined by your staff.

- 3.3 When concurrence to reduce the emergency classification level is obtained:
 - 3.3.1 Document the time you reduce the emergency classification level.
 - 3.3.2 Notify all emergency organizations activated and notified of emergency classification ie:
 - Technical Support Center
 - Operations Support Center
 - Emergency Survey Center
 - Emergency Offsite Facility
 - New York State
 - Monroe County
 - Wayne County
 - US NRC
- 3.4 Continue to monitor plant conditions to reclassify the emergency classification level.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-100

REV. NO. 0

GINNA STATION EVENT EVALUATION

AND CLASSIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

J. C. [Signature]
QC REVIEW

[Signature]
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 4 PAGES

GINNA STATION EVENT EVALUATIONAND CLASSIFICATION1.0 PURPOSE:

- 1.1 The purpose of this procedure is to provide guidance to personnel in evaluating situations which may require activation of the SC-1 Emergency Plan and direct them to appropriate implementing procedures. Prompt recognition and classification is necessary to ensure the timely activation of support functions and notification of OFF-SITE organizations.

2.0 REFERENCES:

- 2.1 10CFR50 Appendix E
2.2 NUREG-0654
2.3 NUREG-0696
2.4 SC-1

3.0 INSTRUCTIONS:

- 3.1 In the event of an abnormal condition the Control Room Personnel will:
- 3.1.1 Perform the immediate responses defined in the appropriate plant procedures.
- 3.1.2 Classify the situation using the guidelines of Appendix I.
- 3.1.3 Implement applicable Emergency Plan procedures based on Appendix I guidelines.
- | | | |
|---------|-------------------|--------|
| 3.1.3.1 | UNUSUAL EVENT | SC-201 |
| 3.1.3.2 | ALERT | SC-202 |
| 3.1.3.3 | SITE EMERGENCY | SC-203 |
| 3.1.3.4 | GENERAL EMERGENCY | SC-204 |

APPENDIX I GUIDELINES

INITIATING CONDITION	UNUSUAL EVENT PARAMETER GO TO SC-201	ALERT PARAMETER GO TO SC-202	SITE EMERGENCY PARAMETERS GO TO SC-203	GENERAL EMERGENCY PARAMETER GO TO SC-204
REACTOR COOLANT LEAKAGE	a. Safety Injection Initiated and discharging to vessel b. Unidentified leakage > 1 gpm c. Identified leakage > 10 gpm d. S/G leakage > .1 gpm e. Pipe, vessel, or valve body leak.	a. Unexplained charging pump flow > 50 gpm. b. Safety injection flow > 50 gpm	a. SI flow > 200 gpm	a. Safety injection initiated with failure of: -SI Pump or -RHR Pump or -Loss of natural circulation
FUEL CLADDING DEGRADA- TION	a. Coolant activity > 84/E b. R-9 increase of 500 mr/hr in 30 minutes.	a. Coolant activity I 131> 300 Hci/cc b. R-9 increase of 4000 mr/hr or reading 10,000 mr/hr. c. RCP seizure	a. Technical staff evaluation of reactor conditions indicates a degraded core	a. Safety injection initiated succ- essfully with subsequent failure of: -containment recirculation fan or -containment spray pump.
SECONDARY SYSTEM	a. Rapid depressurization of Steam or Feedwater system	a. Steam line break with primary to secondary leakage indicated. b. Steam Generator Tube leakage > 1 gpm with loss of offsite power.	a. Steam line break with primary to secondary leakage > 50 gpm and R-9 > 500 mr/hr. b. S/G Tube leak with Safety Injection initiated.	a. Transient init- iated by loss of Feedwater followed by failure of Auxiliary Feed- water for an extended period.
LOSS OF FISSION PRODUCT BARRIER	a. Loss of containment integrity.	a. 1R/hr on containment area monitor except during flux mapping. b. Alarm on containment process monitor R-10A R-11, R-12. c. Fuel damage accident.	a. Major damage to spent fuel assembly. b. Uncovering of spent fuel.	a. Loss of 2 of 3 fission barriers with potential loss of third: 1. Fuel Cladding 2. Reactor cool- ant System 3. Containment
EFFLUENT RELEASE	a. Exceeding Tech Spec. limit for liquid or gaseous release. (TS-3.9) b. R-14 > 1.1×10^4 cpm.	a. Greater than 10 times Tech. Spec limit for liquid or gaseous release. b. R-14 > 1.1×10^5 cpm.	a. R-14 off scale b. Containment monitor reading 1R/hr with containment press- ure > 28 psig c. Offsite teams report > 50 mr/hr whole body or 2 hr thyroid dose > 500 mr.	a. Offsite Survey Teams report 500 mr/hr whole body or 2 hr. thyroid dose > 1 Rem. b. Analysis of effluent release exceeds the mpc as specified in 10CFR 20 Appen- dix B Table II column 2 on a radionuclide basis.

APPENDIX I GUIDELINES

INITIATING CONDITION	UNUSUAL EVENT PARAMETER GO TO SC-201	ALERT PARAMETER GO TO SC-202	SITE EMERGENCY PARAMETERS GO TO SC-203	GENERAL EMERGENCY PARAMETER GO TO SC-204
LOSS OF POWER	a. Emergency loss of 751, or 767, or #12 transformer. b. Loss of both diesel generators	a. Loss of 751, or 767, or #12 transformer and loss of both generators. b. Loss of both batteries.	a. Loss of 751 or 767 #12 Transformer and loss of both Diesel Generators for 15 minutes. b. Loss of both batt- eries for 15 min.	a. Loss of 751 or 767, or #12 Transformer, & both Diesel Gen- erators, with total loss of feed water
OTHER CONDITIONS	a. Shift Supervisor Discretion. Plant conditions that warrant increased awareness on the part of the state & counties.	a. Shift Supervisor Discretion. Plant condition that warrant activation of TSC, OSC, or ESC.	a. Shift Supervisor Discretion. Plant conditions that warrant activation of emergency Centers & precau- tionary public notification.	a. Shift Supervisor Discretion. Plant condition that could lead to large radio- logical release
LOSS OF INDICATORS ANNUNCIA- TORS, OR ALARMS	a. Loss of Indication Alarms requiring a plant shutdown. b. Loss of all indications for any given parameters.	a. Most alarms lost.	a. Most or ALL Alarms lost for 15 min. while not in cold shutdown. b. Plant transient with alarms lost.	
CONTROL ROOM EVACUATION		a. Control Room Evacuation	a. Control Room Evacuation with local shutdown stations not established within 15 minutes.	
LOSS OF ENGINEERED SAFETY OR FIRE PROTECTION FEATURES	a. Exceeding a limiting condition for operation on a safety system requiring a plant shut- down. b. Exceeding a limiting condition for operation on the fire system requiring a plant shut- down.	a. Reactor not subcritical after a Reactor Trip. b. Complete loss of any function needed for a cold shutdown.	a. Loss of system or equipment need- ed for a hot or cold shutdown.	a. Transient requiring a Reactor Trip which fails to trip the Reactor & failure of core cooling which could lead to core melt

APPENDIX I GUIDELINES

INITIATING CONDITION	UNUSUAL EVENT PARAMETER GO TO SC-201	ALERT PARAMETER GO TO SC-202	SITE EMERGENCY PARAMETERS GO TO SC-203	GENERAL EMERGENCY PARAMETER GO TO SC-204
NATURAL PHENOMENON BEING EXPER- IENCE	a. Earthquake felt in plant or detection on plant seismic instrumentation. b. Lake level above 252 ft. c. Lake level below 242 ft. d. Deer Creek flooding over entrance road bridge. e. Large wave(s) causing water to push over armor stone. f. Tornado on site/hurricane warnings.	a. Earthquake > .02 but <.08 as registered on plant accelograph b. Lake level above 253 ft. c. Lake level below 241 ft. d. Flood or large wave(s) which bring water into the plant. e. Tornado striking plant building f. Hurricane winds > 70 mph.	Plant NOT in cold shutdown and: a. Earthquake >.08 as registered on plant accelograph. b. Lake level above 253.5 ft. c. Flood or large wave(s) which threaten vital equipment. d. Steady winds > 75 mph.	
HAZARDS BEING EXPER- IENCED OR PROTECTED	a. Aircraft crash on site b. Near or onsite explosion. c. Near or onsite toxic or flamm- able gas release. d. Turbine rotating component failure causing shutdown.	a. Aircraft crash into site building. b. Explosion affecting plant operation. c. Entry of uncontrolled toxic or flammable gas into building. d. Turbine failure causing casing penetration. e. Missile striking building.	Plant NOT in cold shutdown and: a. Aircraft crash in- to vital area. b. Explosion or missile damaging safety equipment. c. Entry into vital areas of uncon- trolled toxic or flammable gas	
FIRE	a. Fire lasting 10 minutes. b. Fire department called.	a. Fire in vicinity of safety system	a. Fire affecting safety system.	
CONTAM- INATED INJURY	a. Transportation of contaminated patient to a hospital.			
SECURITY	a. Attempted entry to site b. Attempted sabotage c. Security threat (Pickets, Demonstration).	a. On-going Security compromise b. Continuing Security threat	a. Imminent loss of physical control of the plant	a. Loss of physical control of the plant
SAFETY OR RELIEF VALVE FAILURE	a. RCS safety or relief valve fails to close. b. Safety injection system relief valve fails.			
ABNORMAL COOLANT TEMPERA- TURE AND/ OR PRESSURE	a. Exceeding a limiting condition for operation for heatup or cooldown. b. Exceeding a safety limit.			

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-701

REV. NO. 0

INITIAL NOTIFICATION STATUS REPORT

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Bolini
QC REVIEW

B. [Signature]
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 3 PAGES

SC-701INITIAL NOTIFICATION STATUS REPORT

- 1.0 PURPOSE:
- 1.1 Provide a list of important information to be provided to offsite agencies during an emergency situation.
- 1.2 Provide information in a standardized format similar to that of the receiving party.
- 2.0 REFERENCES:
- 2.1 SC-1 Radiation Emergency Plan.
- 2.2 NYS Radiological Emergency Preparedness Plan.
- 3.0 INSTRUCTIONS:
- 3.1 The initial notification status form Attachment I is to be reported to the USNRC, within one hour.
- 3.2 The form Attachment I should be filled out with the assistance of the Shift Supervisor.
- 3.2.1 Obtain weather information, step 9 of form, using Control Room weather indication or the computer.
- 3.2.2 Obtain, for Shift Supervisor's use, SC-240 Protective Action Recommendations.
- 3.3 Report the information on the completed Initial Notification Status form to USNRC, New York State, Wayne and Monroe County using SC-601, or SC-602, or SC-603, or SC-604.
- 3.3.1 Report the information by reading the statement including the designation letter. ie ☐ A
- 3.3.2 The status will be reported when the event is classified and any time the classification is increased, using Attachment I.
- 3.4 After completing the form request from the Shift Supervisor if you should proceed to performing SC-702 Plant Status Report.

ATTACHMENT IINITIAL NOTIFICATION STATUS FORM

1. Nuclear Facility providing this report ☒ C Ginna Station.
2. This ☒ A is an exercise.
This ☐ B is not an exercise.
The Event occurred at Time _____
Date _____
3. Emergency Classification: (See SC-100)
☒ A Unusual Event
☐ B Alert
☐ C Site Emergency
☐ D General Emergency
☐ E Transportation Accident
☐ F Other _____
4. Reported by _____
Time of Report _____
Date of Report _____
5. There ☒ A has been a release of radioactivity
There ☐ B has not been a release of radioactivity
to ☒ C Atmosphere
☐ D Ground
☐ E Lake Ontario
6. The release ☒ A is continueing
☐ B has terminated
☐ C not applicable

7. Protective Actions (See SC-240)

- ☐ A None needed outside the site boundary, notified for information only.
- ☐ B There is need for offsite protective action. Affected area include sectors or ERPA's.

8. Recommended Protective Actions

- ☐ A Not Applicable
- ☐ B Shelter within 10 miles
- ☐ C Evacuate within 10 miles

9. Weather

- ☐ A Wind speed _____ miles per hour
- ☐ B Direction (from) _____ degrees
- ☐ C General Weather conditions _____

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

CHINA STATION
DATE :-
TIME :-

PROCEDURE NO. SC-606

REV. NO. 0

SPECIALIZED NOTIFICATION LIST

TECHNICAL REVIEW

PORC REVIEW DATE 13-31-82

J. C. Brown
QC REVIEW

B. A. Brown
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 5 PAGES

SC-606SPECIALIZED NOTIFICATION LIST

- 1.0 PURPOSE:
- 1.1 To provide the Emergency Coordinator with a listing of names and phone numbers of personnel and facilities that may be required for special assignments during a Radiation Emergency.
- 2.0 REFERENCE:
- 2.1 Radiation Emergency Plan, SC-1.
- 3.0 INSTRUCTIONS:
- 3.1 As directed by the Emergency Coordinator, the following personnel/facilities may be called for special assistance. This list should be reviewed annually as part of the Radiation Emergency Drill.
 - 3.1.1 Medical
 - 3.1.1.1 Dr.
 - 3.1.1.2 Dr.
 - 3.1.1.3 Ontario Volunteer Ambulance
 - 3.1.1.4 Rochester General Hospital
 - 3.1.1.5 RN
 - 3.1.1.6 Dr.
 - 3.1.2 Police
 - 3.1.2.1 New York State Police Warning Point
 - 3.1.2.2 Canandaigua State Police
 - 3.1.2.3 Williamson State Police
 - 3.1.2.4 Wayne County Sheriff

3.1.2.5 Monroe County Sheriff

3.1.3 Fire

3.1.3.1 Ontario Volunteer Fire Department

3.1.4 Westinghouse Emergency Response Organization

Notify one Westinghouse contact using list in order shown.
Provide available facts and individual to provide updates.

3.1.4.1
Operating Plant Service Manager

3.1.4.2

3.1.4.3

3.1.4.4
Service Response Manager

3.1.4.5

3.1.4.6
Emergency Response Director

3.1.4.7
Emergency Response Deputy Director

3.1.4.8
Emergency News Communications

3.1.5 Other

3.1.5.1 Ontario Town Supervisor

Ontario Water Department

- 3.1.5.2 U.S. Coast Guard: Rochester
Buffalo
- 3.1.5.3 Plant Protection Department
Kodak Park
- 3.1.5.4 Wayne County Emergency Operations
Center
- 3.1.5.5 Director Wayne County Office Disaster Preparedness
- 3.1.5.6 Monroe County Office of Emergency
Preparedness
(Nights, weekends & holidays)
- 3.1.5.7 Director, Monroe county Office of Emergency Preparedness
- 3.1.5.8 Univeristy of Rochester Advance RAP Team
- 3.1.5.9 National Weather Service (Rochester)
(Buffalo)
- 3.1.5.10 Radiation Management Corporation
- 3.1.5.11 Helgeson Nuclear Services, Inc.
- 3.1.5.12 Ph.D.
Consultant in Limnology and Oceanography
- 3.1.5.13 Nuclear Projects, Inc.
- 3.1.5.14 Dr.
University of Michigan, School of
Public Health
- 3.1.5.15
- 3.1.5.16 Institute of Nuclear Power Operations

- 3.1.5.17 Nuclear Energy Liability - Protection Insurance Association
- 3.1.6 Company Assistance
 - 3.1.6.1 Transportation Department
 - 3.1.6.2 General Maintenance
 - 3.1.6.3 Electric Substation Department
 - 3.1.6.4 Power Controller
- 3.1.7 Company Personnel
 - 3.1.7.1 Chairman of the Board
 - 3.1.7.2 President
 - 3.1.7.3 Executive Vice President
 - 3.1.7.4 Manager of Corporate Communication
 - 3.1.7.5 Vice President of Electric and Steam Production
 - 3.1.7.6 Superintendent of Nuclear Production
 - 3.1.7.7 Manager, Chemical/Environment Laboratory
 - 3.1.7.8 V.P. and Chief Engineer
 - 3.1.7.9 Manager, Nuclear Engineering
 - 3.1.7.10 Q/A Coordinator

- 3.1.7.11 Chief Environmental Engineer
- 3.1.7.12 Supervisor, Power Plant Chemistry
- 3.1.8 Nuclear Regulatory Commission
- 3.1.8.1 Nuclear Regulatory Commission
Region I
King of Prussia, Pa.
- 3.1.8.2 Radiation Assistance Program
Dept. of Energy
BrookHaven National Lab
- 3.1.8.3 Commerical Telephone System to
NRC Operations Center (via
Bethesda Central Office.)
- 3.1.8.4 Commercial Telephone System to
NRC Communications Center (via
Silver Spring Central Office)
- 3.1.8.5 Commerical Telephone System to
NRC Operator (via Bethesda
Central Office)
- 3.1.9 New York State
- 3.1.9.1
- 3.1.9.2 Lake District ODP

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-605

REV. NO. 0

SITE CONTINGENCY CALL LIST

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

JC Bodini
QC REVIEW

J Moon
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-605SITE CONTINGENCY CALL LIST1.0 PURPOSE:

- 1.1 Provide a notification list to activate the Emergency Response Organization.

2.0 REFERENCES:

- 2.1 SC-200
- 2.2 SC-302
- 2.3 SC-312
- 2.4 SC-322

3.0 INSTRUCTION:

- 3.1 Notify the below individuals "Report to Ginna Station for a SC Response".
 - 3.1.1 If individual is not at home leave the message.
- 3.2 Individuals for Emergency Organization:

- 3.3 After completing the above list or when contacted by Technical Support Center, report those people not contacted. (Ginna 280 or 281).

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-604

REV. NO. 0

GENERAL EMERGENCY NOTIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bolini
QC REVIEW

Frank Adams
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 3 PAGES

SC-604GENERAL EMERGENCY NOTIFICATION1.0 PURPOSE:

- 1.1 Provide information for the activation of the Emergency Response Plan at the General Emergency Level.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 NUREG 0654

3.0 INSTRUCTIONS:

- 3.1 During normal working hours steps 3.2 through 3.2.3 may not be necessary.

- 3.2 If you completed SC-602 go to step 3.4.

Report we have a General Emergency based on _____ to
the following: (Initiating Condition)

	(Speed Dial)	(Manual Dial)
	Ext. 280	

- | | | | |
|-------|--|------|----------------------|
| 3.2.1 | Plant Superintendent - Bruce Snow | 6410 | 9-1 716-671-
5912 |
| | If not available - Jack Noon | 6425 | 9-1-716-342-
1282 |
| 3.2.2 | Duty Engineer - see operations Plan of Day for phone number. | | |
| 3.2.3 | USNRC Resident Inspector Roy Zimmerman 9-1-716-223-1477. | | |
| 3.3 | Notify Electric Line Operating to begin the Site Contingency Call
List SC-605 71-2582. | | |
| 3.4 | Go to step 3.5 if Security was notified of Site Emergency. Notify Security to activate Security Personnel Actions During A Radiation Emergency GS-10 ext. 258 or page. | | |

- 3.5 Report information on Plant Status Report Form SC-701 to the following:
- 3.5.1 New York State, Wayne and Monroe Counties, using NYS Hot Line,
 -Press Button Allow 10 seconds
 -Request roll call - New York State
 Wayne County
 Monroe County
 This is Ginna Station
 -Report information.
- If out of order
 - New York State 9-1-518-457-2200 or
 9-1-518-457-6811
 - Wayne County 9-1-946-4878 or
 9-1-589-8636
 - Monroe County 9-1-716-473-0710 or
 9-1-716-428-7200
- 3.5.2 USNRC Operations Officer using NRC RED PHONE (within one hour)
 -when answered on other end report information
 If out of order:
- Commercial Telephone to NRC 9-1-301-492-8111
 Operations Center (via Bethesda Central Office).
- To NRC Operations Center 9-1-301-427-4056
 (via Silver Springs Central Office)
- To NRC Operator 9-1-301-492-7000
 (via Bethesda Central Office).
- 3.6 Report "We have a General Emergency based on _____ to the
 following: (Initiating Condition)
- 3.6.1 Vice President of Electric and Steam Production
 John Maier Business - 71-2637
 Home -
- 3.6.2 Superintendent of Nuclear Production
 Lee Lang Business - 71-2794
 Home -
- 3.6.3 Westinghouse - 9-1-412-256-7844
 Please activate your Emergency Response Plan.
- 3.6.4 INPO - 9-1-404-953-0904
 Please activate your Emergency Response Plan.
- 3.7 If requested by Emergency Coordinator request radiological assistance
 from RAP team, Brookhav - 9-1-516-282-2200
- 3.8 Notify Radiation Management Corporation of General Emergency
 Condition. - 9-1-215-243-2950

- 3.9 Notify Plant Doctors of General Emergency condition and any medical problems

Dr. Loomis

Office - 9-524-2881

Home -

Dr. Daniel Morte

Office - 9-524-2881

Home -

- 3.10 Notify the US Coast Guard of the General Emergency and to keep the Lake area near the plant clear of water traffic.
- 9-1-716-846-4168

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-602

REV. NO. 0

ALERT NOTIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Brdine
QC REVIEW

R. A. Brown
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-602ALERT NOTIFICATION1.0 PURPOSE:

- 1.1 Provide information for the activation of the Emergency Response Plan at the Alert Level

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 NUREG 0654

3.0 INSTRUCTIONS:

- 3.1 During normal working hours steps 3.2 through 3.2.3 may not be necessary.

- 3.2 Report we have an Alert based on _____ to
the following: (Initiating Condition)

(Speed Dial)	(Manual Dial)
Ext. 280	

- | | | | |
|-------|-----------------------------------|------|------------------|
| 3.2.1 | Plant Superintendent - Bruce Snow | 6410 | 9-1 716-671-5912 |
| | If not available - Jack Noon | 6425 | 9-1-716-342-1282 |
- 3.2.2 Duty Engineer - see operations Plan of Day for phone number.
- 3.2.3 USNRC Resident Inspector Roy Zimmerman 9-1-716-223-1477.
- 3.3 Notify Electric Line Operating to begin the Site Contingency Call List SC-605 71-2582.
- 3.4 Notify Security to activate Security Personnel Actions during a Radiation Emergency GS-10 ext. 258 or page.

3.5 Report information on Plant Status Report Form SC-701 to the following:

3.5.1 New York State, Wayne and Monroe Counties, using NYS Hot Line,

-Press Button Allow 10 seconds

-Request roll call - New York State

Wayne County

Monroe County

This is Ginna Station

-Report information.

If out of order

- New York State 9-1-518-457-2200 or

9-1-518-457-6811

- Wayne County 9-1-946-4878 or

9-1-589-8636

- Monroe County 9-1-716-473-0710 or

9-1-716-428-7200

3.5.2 USNRC Operations Officer using NRC RED PHONE (within one hour)

-when answered on other end report information

If out of order:

-Commercial Telephone to NRC 9-1-301-492-8111

Operations Center (via Bethesda Central Office).

-To NRC Operations Center 9-1-301-427-4056

(via Silver Springs Central Office)

-To NRC Operator 9-1-301-492-7000

(via Bethesda Central Office).

3.6 Report "We have an Alert based on _____ to the
following: (Initiating Condition)

3.6.1 Vice President of Electric and Steam Production

John Maier Business - 71-2637

Home -

3.6.2 Superintendent of Nuclear Production

Lee Lang Business - 71-2794

Home -

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-600

REV. NO. 0

EMERGENCY PLAN QUALIFICATION AND NOTIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 3-17-82

JC Bodini
QC REVIEW

Burt Jones
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 15 PAGES

SC-600

EMERGENCY PLAN QUALIFICATION AND NOTIFICATION1.0 Purpose:

- 1.1 Provide a current list of Emergency Response Organization qualified individuals and a method of contacting them.

2.0 References:

- 2.1 SC-200, Emergency Response Organization/Responsibilities.
- 2.2 A-103.8, Emergency Plan Training

3.0 Instructions:

- 3.1.1 Qualified individuals for each function can be found with home phone numbers on the noted attachments:

<u>Function</u>	<u>Attachments</u>
Emergency Coordinator	I
Dose Assessment Manager	
Or Health Physics/Chemistry	I
Plant Assessment Manager	II
Plant Operations Assessment Manager	II
Plant Maintenance Assessment Manager	II
Plant Technical Assessment Manager	III
Nuclear Assessment	III
I/C Electrical System Assessment	III
Mechanical/Hydraulic System Assessment	III
Computer Analyst	III
Administrative Communications Manager	IV
Switchboard Operator	IV
Communicator	IV
Security Manager	IV
Emergency Survey Team	V
Emergency Survey Center Manager	VI
Control Room	VII
Operations Support Center	VIII

- 3.1.2 The qualified individual attachments shall be reviewed and updated semi-annually.
- 3.1.3 Individuals shall be removed from the attachment if they have not participated in Emergency Training during the previous eighteen months.
- 3.1.4 Individuals with * were evaluated during 1/82.

ATTACHMENT I

EMERGENCY COORDINATOR

The below individuals through their job responsibilities and Technical Support Center Training, as described in Procedure A-103.8, are qualified as Emergency Coordinators.

Superintendent	-B.A. Snow*	(716) 671-5912
Asst. Superintendent	-J.C. Noon	(716) 324-1282
Shift Supervisor	-R.B. Junot	(716) 334-2690
Shift Supervisor	-L.E. Depew	(315) 483-8339
Shift Supervisor	-R.A. Yeckel	(716) 381-7534
Shift Supervisor	-L.F. Smith	(315) 524-9351
Shift Supervisor	-M.J. Sexton	(716) 265-2455
Shift Supervisor	-D.E. Horning	(315) 524-7148
Training Coordinator	-R.W. Morrill	(716) 671-7082

DOSE ASSESSMENT MANAGER OF HEALTH PHYSICS/CHEMISTRY

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified Dose Assessment Managers of Health Physics/Chemistry.

Supervisor of Health Physics and Chemistry	-D.L. Filkins*	(716) 385-2495
Health Physicist	-B.R. Quinn	(315) 524-5201
Health Physicist	-F.J. Mis*	(716) 328-1984

ATTACHMENT II

PLANT ASSESSMENT MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in Procedure A-103.8, are qualified as Plant Assessment Managers.

Technical Engineer	-G.F. Larizza*	(716) 872-6342
Nuclear Engineer	-T.A. Meyer	(315) 589-5271

PLANT OPERATIONS ASSESSMENT MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified as Plant Operations Assessment Managers.

Operations Engineer	-C.H. Peck	(716) 265-0664
Operations Supervisor	-E.J. Beatty*	(716) 663-4829

PLANT MAINTENANCE ASSESSMENT MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified as Plant Maintenance Assessment Managers.

Maintenance Engineer	-S.M. Spector*	(716) 271-6177
Technical Assistant for Operational Assessment	-J.T. St. Martin	(716) 586-5676

ATTACHMENT III

PLANT TECHNICAL ASSESSMENT MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in Procedure A-103.8, are qualified as Plant Technical Assessment Managers.

Technical Projects Supervisor	-T.A. Marlow*	(716) 288-7646
Nuclear Engineer	-T.A. Meyer	(315) 589-5271

NUCLEAR ASSESSMENT

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified for Nuclear Assessment.

Nuclear Engineer	-T.A. Meyer*	(315) 589-5271
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I/C ELECTRICAL SYSTEM ASSESSMENT

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified for I/C Electrical Assessment.

I/C Supervisor	-E.C. Edgar*	(716) 377-3386
Test and Results Supervisor	-D.R. Gent	(716) 342-4026

MECHANICAL/HYDRAULIC SYSTEM ASSESSMENT

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified for Mechanical/Hydraulic System Assessment.

Maintenance Supervisor	-L.E. Boutwell	(315) 524-8764
Asst. Training Coordinator	-G.D. Meier*	(315) 589-6691

ATTACHMENT III (con't)

COMPUTER ANALYST

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified Computer Analysts.

Computer Technician	-R. Dobbs*	(315) 589-2590
Computer Technician	-B. Steffon*	(315) 524-7608

ATTACHMENT IV

ADMINISTRATIVE COMMUNICATIONS MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified Administrative Communications Manager.

-F.W. Aman*	(315) 524-8084
-F.A. Henry	(315) 524-2419
-K.A. Congdon	(315) 597-2122

SWITCHBOARD OPERATORS

The below individuals through their job responsibilities are qualified Switch Board Operators.

Office Supervisor	-F.A. Henry*	(315) 524-2419
Asst. Office Supervisor	-K.A. Congdon*	(315) 597-2122
	-M. Forest	(315) 524-9393
	-G. Wind	(315) 589-9798

COMMUNICATORS

The below individuals through training as described in procedure A-103.8 are qualified Radio Operators.

Westinghouse Site Services Manager	-F.W. Aman*	(315) 524-8084
	-D.C. Gray	(716) 872-0712
	-T. Harding*	(716) 671-8756
	-J. St. Martin*	(716) 586-5676
	-T. Hafera*	(716) 872-5671
	-C. Rioch*	(716) 924-3155
	-M. Smith	(716) 265-0305
	-W. Stiewe*	(716) 467-6177
	-J. Neis*	(716) 872-2455
	-S. Adams*	(716) 865-0928
	-G. Eng*	(716) 265-2837
	-K. Masker*	(716) 872-1377
	-J. Walden*	(716) 381-3996
	-R. Forzensi*	(716) 872-2636

ATTACHMENT IV (Con't)

SECURITY MANAGER

The below individuals through their job responsibilities and Technical Support Center Training, as described in procedure A-103.8, are qualified Security Managers.

Supervisor of Nuclear Security	-R. Wood*	(716) 872-4240
Supervisor on Nuclear Security Training	-M. Fowler	(716) 223-4648

ATTACHMENT V

EMERGENCY SURVEY TEAM

The below individuals through training as described in procedure A-103.8 are qualified as Emergency Survey Team members.

Health Physics Section

-W. Goodman*	(716) 544-4101
-R. Kenyon*	(315) 483-6512
-R. Gasper*	(315) 589-8584
-N. Kiedrowski*	(315) 524-2894
-M. Klueber*	(315) 589-8184
-M. Harrison*	(716) 671-3079
-J. MacIntyre*	(716) 385-2062
-R. Garcia*	(716) 671-8014
-D. Hanks*	(315) 589-2827
-J. Bement*	(716) 394-1263
-J. Knorr	(315) 524-8265

Maintenance Section

-M. Meleca*	(716) 265-1398
-D. Wilbert	(716) 872-3117
-K. O'Brien	(716) 265-2139
-W. Freeman*	(716) 671-7711
-R. Luebner*	(716) 265-1257
-S. Meister	(315) 483-6366
-D. Powell	(315) 597-6408
-F. Sehm	(716) 671-1584

Operations Section

-R. Dodge	(315) 524-7294
-R. Dangler	(315) 483-8220
-R. Beldue	(315) 587-2796
-K. McLaughlin	(716) 377-6961
-M. Ruby	(716) 872-6559
-J. Hart	(315) 483-6534
-T. Plantz	(315) 483-8083
-L. Briggs	(315) 926-5269
-M. Backus	(315) 589-9437
-H. VanHoute	(315) 483-8438
-R. Ruedin	(315) 524-3968
-R. Carroll	(716) 872-2219
-R. Lingl	(716) 392-9652
-W. Everett	(315) 589-8156
-G. Litzenberger	(315) 589-8292
-F. Maciuska	(315) 986-3839
-P. Sidelinger	(716) 671-3198
-R. McMahon	(716) 235-5527
-N. Brehse	(716) 392-9527
-N. Meaker	(315) 524-2340
-S. Lentine	(716) 334-8168
-M. Foster	(315) 589-8575

ATTACHMENT V (Con't)

EMERGENCY SURVEY TEAM (Con't)

Operations Section (Con't)

-G. Massey	(716) 671-4237
-D. Berry	(716) 328-1560
-J. Banke	(315) 926-5994
-B. Sensenbach	(315) 589-5601
-G. Mostert	(716) 223-4155

Technical Section

-W. Faustoferri	(716) 586-0382
-D. Gent	(716) 342-4026
-S. Beluke	(315) 597-5170
-R. Paul*	(315) 597-6064
-F. Schwind	(315) 524-8223
-G. Joss	(315) 524-7552

STA'S

-T. Harding	(716) 671-8756
-C. Rioch	(716) 924-3155
-W. Stiewe	(716) 467-6177

Training

-G. Lawler	(716) 254-8786
-R. Burt	(716) 265-0138
-T. Alexander	(315) 524-8084
-R. Morrill	(716) 671-7082

ATTACHMENT VI

EMERGENCY SURVEY CENTER MANAGER

The below individuals through training as described in procedure A-103.8 are qualified as Emergency Survey Center Managers.

Training Section

-R.W. Morrill	(716) 671-7082
-R.O. Burt	(716) 265-0138
-T.L. Alexander	(315) 524-8084

Quality Control Section

-J. Bodine*	(716) 671-1113
-K. Nassauer*	(315) 986-5920
-P. Perry*	(716) 671-3547
-D. Hamelink	(716) 381-2621
-G. Meier	(315) 589-6691
-J. Supina	(716) 227-5239
-J. Straight	(716) 889-3512
-D. Filion	(716) 265-9728

ATTACHMENT VII

CONTROL ROOM

The below individuals through job responsibilities and training, as described in procedure A-103.8, are qualified for Control Room responsibilities during a Radiation Emergency.

Health Physics Section

-W. Goodman	(716) 544-4101
-R. Kenyon	(315) 483-6512
-R. Gasper	(315) 589-8584
-N. Keidrowski	(315) 524-2894
-J. Knorr	(315) 524-8265
-M. Kluber	(315) 589-8184
-M. Harrison	(716) 671-3079
-J. MacIntyre	(716) 385-2062
-R. Garcia*	(716) 671-8014
-D. Hanks	(315) 589-2827
-J. Bement	(716) 394-1263

Shift Technical Advisor

-J. Neis	(716) 872-2455
-T. Harding*	(716) 671-8756
-T. Hafera	(716) 872-5671
-C. Rioch	(716) 924-3155
-M. Smith*	(716) 265-0305
-W. Stiewe	(716) 467-6177
-T. Schuler	(716) 671-3643
-J. Widay	(716) 442-7511

Operations Section

-C. Peck	(716) 265-0664
-M. Sexton*	(716) 265-2455
-L. Depew*	(315) 483-8339
-R. Junot*	(716) 334-2690
-D. Horning*	(315) 524-7148
-R. Yeckel	(716) 381-7534
-L. Smith	(315) 524-9351
-H. VanHoute*	(315) 483-8438
-R. Hurley*	(716) 671-6132
-R. Ruedin*	(315) 524-3968
-R. Carroll*	(716) 872-2219
-R. Beldue*	(315) 587-2796
-D. Berry*	(716) 328-1560
-S. Lentine*	(716) 334-8168
-J. Pollock*	(716) 872-0524
-M. Ruby*	(716) 872-6559
-G. Massey*	(716) 671-4237
-R. Lingl*	(716) 392-9652

ATTACHMENT VII (Con't)

CONTROL ROOM (Con't)

Operations Section (con't)

-T. Plantz*	(315) 483-8083
-J. Banke*	(315) 926-5994
-M. Foster*	(315) 589-8575
-B. Sensenbach*	(315) 589-5601
-N. Meaker	(315) 524-2340
-P. Sidelinger*	(716) 671-3198
-W. Everett*	(315) 589-8156
-T. White	(716) 381-0961
-P. Gorski	(315) 589-8748
-J. Hart*	(315) 483-6534
-K. McLaughlin*	(716) 377-6961
-G. Mostert*	(716) 223-4155
-M. Backus	(315) 589-9437
-N. Brehse	(716) 392-9527
-L. Briggs	(315) 926-5269
-R. Dodge	(315) 524-7294
-R. Dangler	(315) 483-8220
-G. Litzenberger	(315) 589-8292
-D. Klemz	(716) 865-1505

Training Section

-R. Morrill	(716) 671-7082
-T. Alexander	(315) 524-8084

ATTACHMENT VIII

OPERATIONS SUPPORT CENTER

The below individuals through their job responsibilities and training, as described in procedure A-103.8, are qualified to perform the duties as a member of the Operations Support Center.

Health Physics Section

-W. Goodman	(716) 544-4101
-R. Kenyon	(315) 483-6512
-R. Gasper	(315) 589-8584
-N. Kiedrowski	(315) 524-2894
-J. Knorr	(315) 524-8265
-M. Klueber	(315) 589-8184
-M. Harrison	(716) 671-3079
-J. MacIntyre	(716) 385-2062
-R. Garcia	(716) 671-8014
-D. Hanks	(315) 589-2827
-J. Bement	(716) 394-1263

Maintenance Section

-L. Boutwell	(315) 524-8764
-C. Edgar	(716) 377-3386
-P. Shea	(315) 462-9798
-T. Rakiewicz	(716) 223-2725
-G. Cain	(315) 524-7343
-J. Dean	(716) 671-7082
-M. Leach	(315) 483-8953
-R. Popp	(716) 671-7635
-M. Meleca	(716) 265-1398
-D. Wilbert	(716) 872-3117
-M. Karalius	(716) 265-1019
-J. Jones	(716) 265-2646
-S. Johnson	(315) 524-8242
-H. Schoenmaker	(716) 586-0139
-R. Roth	(716) 225-9018
-W. Freeman	(716) 671-7711
-J. Wayda	(716) 352-1857
-R. DiCiaccio	(716) 247-6189
-G. Gibaud	(716) 621-2554
-D. Farnan	(716) 865-0287
-K. O'Brien	(716) 265-2139
-R. Latz	(315) 524-9733

ATTACHMENT VIII (Con't)

OPERATIONS SUPPORT CENTER (Con't)

Maintenance Section (Con't)

-C. Rauber	(716) 385-2495
-D. Baker	(315) 986-7670
-M. Bauman	(716) 461-3429
-R. Luebner	(716) 265-1257
-G. Wahl	(716) 872-5567
-D. Marriott	(315) 986-7536
-D. Powell	(315) 597-6408
-E. Graus	(716) 225-0140
-K. Blackall	(315) 483-6089
-E. Zink	(315) 986-4747
-S. Meister	(315) 483-6366
-W. Thompson	(315) 524-5411
-R. Wunder	(716) 671-5852
-L. Hughes	(315) 524-6096
-J. Enderlin	(315) 589-8249
-F. Sehm	(716) 671-1584

Operations Section

-J. Hart	(315) 483-6534
-F. Maciuska	(315) 986-3839
-M. Sexton	(716) 265-2455
-L. Depew	(315) 483-8339
-R. Junot	(716) 334-2690
-D. Horning	(315) 524-7148
-H. VanHoute	(315) 483-8438
-R. Hurley	(716) 671-6132
-R. Ruedin	(315) 524-3968
-R. Carroll	(716) 872-2219
-R. Beldue	(315) 587-2796
-D. Berry	(716) 328-1560
-L. Smith	(315) 524-9351
-S. Lentine	(716) 334-8168
-J. Pollock	(716) 872-0524
-M. Ruby	(716) 872-6559
-G. Massey	(716) 671-4237
-R. Lingl	(716) 392-9652
-T. Plantz	(315) 483-8083
-J. Banke	(315) 926-5994
-M. Foster	(315) 589-8575
-B. Sensenbach	(315) 589-5601
-N. Meaker	(315) 524-2340
-P. Sidelinger	(716) 671-3198
-W. Everett	(315) 589-8156

ATTACHMENT VIII (Con't)

OPERATIONS SUPPORT CENTER (Con't)

Operations Section (Con't)

-K. McLaughlin	(716) 377-6961
-G. Mostert	(716) 223-4155
-M. Backus	(315) 589-9437
-N. Brehse	(716) 392-9527
-L. Briggs	(315) 926-5269
-R. Dodge	(315) 524-7294
-R. Dangler	(315) 483-8220
-G. Litzenberger	(315) 589-8292
-R. McMahon	(716) 235-5527

STA'S

-T. Hafera	(716) 872-5671
-T. Harding	(716) 671-8756
-C. Rioch	(716) 924-3155
-M. Smith	(716) 265-0305
-W. Stiewe	(716) 467-6177

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-601

REV. NO. 0

UNUSUAL EVENT NOTIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodini
QC REVIEW

Bob Smith
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-601UNUSUAL EVENT NOTIFICATION1.0 PURPOSE:

- 1.1 Provide information for the activation of the Emergency Response Plan at the Unusual Event Level.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 NUREG 0654

3.0 INSTRUCTIONS:

- 3.1 During normal working hours steps 3.2 through 3.2.3 may not be necessary.

- 3.2 Report we have an Unusual Event based on _____ to
the following: (Initiating Condition)

- | | | (Speed Dial)
Ext. 280 | (Manual Dial) |
|-------|--|--------------------------|------------------|
| 3.2.1 | Plant Superintendent - Bruce Snow | 6410 | 9-1 716-671-5912 |
| | If not available - Jack Noon | 6425 | 9-1-716-342-1282 |
| 3.2.2 | Duty Engineer - see operations Plan of Day for phone number. | | |
| 3.2.3 | USNRC Resident Inspector Roy Zimmerman 9-1-716-223-1477. | | |

3.3 Report information on Plant Status Report Form SC-701 to the following:

3.3.1 New York State, Wayne and Monroe Counties, using NYS Hot Line,

-Press Button Allow 10 seconds

-Request roll call - New York State

Wayne County

Monroe County

This is Ginna Station

-Report information.

If out of order

- New York State 9-1-518-457-2200 or

9-1-518-457-6811

- Wayne County 9-1-946-4878 or

9-1-589-8636

- Monroe County 9-1-716-473-0710 or

9-1-716-428-7200

3.3.2 USNRC Operations Officer using NRC RED PHONE (within one hour)

-when answered on other end report information

If out of order:

-Commercial Telephone to NRC 9-1-301-492-8111

Operations Center (via Bethesda Central Office).

-To NRC Operations Center 9-1-301-427-4056

(via Silver Springs Central Office)

-To NRC Operator 9-1-301-492-7000

(via Bethesda Central Office).

GINNA STATION
UNIT #1
COMPLETED

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

DATE :-

TIME :-

PROCEDURE NO. SC-410

REV. NO. 0

INSPECTION OF EMERGENCY EQUIPMENT

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. C. Bordini
QC REVIEW

B. Sullivan
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 11 PAGES

SC-410INSPECTION OF EMERGENCY EQUIPMENT1.0 PURPOSE:

- 1.1 The equipment required by the emergency plan and the means of assuring it is available is outlined in this procedure. Inspections will be made monthly as required by Technical Specifications and after each drill or use.

2.0 REFERENCES:

- 2.1 SC-1, Emergency Plan
2.2 Tech. Specs., Table 4.1-1

3.0 INSTRUCTIONS:

- 3.1 Inspect each location using attached appendixes. Indicate number of items present in blank space on appendix.
- 3.1.1 Emergency Survey Center - Appendix A
3.1.2 Control Room - Appendix B
3.1.3 Health Physics Office, Auxiliary Building, Operational Support Center - Appendix C
3.1.4 Technical Support Center - Appendix D
3.1.5 Monthly Inspection Log - Appendix E
- 3.2 If any discrepancies are found make note on the Monthly Inspection Log (Appendix E). If there are no discrepancies, enter NONE on Log Sheet.
- 3.2.1 Discrepancies are to be corrected (or a trouble card submitted) as soon as possible and so noted on the log sheet and filed per A-1701.
- 3.3 Perform operational check with check source on Emergency Plant Vent monitor monthly. Record discrepancies on Monthly Inspection Log - Appendix E and advise Health Physicist.

APPENDIX "A"SITE EMERGENCY EQUIPMENT IN SURVEY CENTER

1. Assignment tag board - all tags in place _____
2. Survey team maps - Red, Green, Orange, Blue, Yellow 15 _____
3. Survey team boxes - Red, Green, Orange, Blue, Yellow,
White - If seal is unbroken assume equipment is intact.
Inventory boxes and change batteries in January and July. 6 _____
4. Betta - Gamma survey instruments - battery check source
check. Assure calibration and efficiency calibrations are
within a six month period. 5 _____
5. High level dose rate meters - battery check, source check,
calibration check. 6 _____
6. Extendable high level survey meter - battery check,
source check, calibration check. 1 _____
7. Nucleus scaler with probe and count shelf-frequency
check, source check, efficiency calibration semi-annually. 1 _____
8. Radiation monitor RM-3C or equivalent, with HP-260 probe
equivalent, battery check, source check, calibration
check. 1 _____
9. Area radiation monitor, stationary - change chart paper,
operational check. 1 _____
10. Dosimeter charger with battery 2 _____
11. Dosimeter (0-5R) - calibration check 14 _____
12. Dosimeter (0-500mr) - calibration check 12 _____
13. Thermal luminescent dosimeters 10 _____
14. Packages of (6) enviromental TLD badges (off-site only) 3 _____
15. Battery operated, low volume air samplers - calibration
check. Run air sampler several minutes to check operation,
semi annually totally discharge and recharge samplers
(February and August) 6 _____
16. Battery charger - operation check, disconnect 1 _____

APPENDIX "A" (cont.)

17. RADECO H 809 B2 air sampler - run 120 minutes	2	_____
18. RADECO H 809 C air sampler - run 1 minute	4	_____
19. Filters for air samplers - particulate		_____
20. Filters for air samplers - silver zeolite		_____
21. Envelopes for air samples - particulate	100	_____
22. Envelopes for air samples - iodine	100	_____
23. Envelopes for smear papers	100	_____
24. Smear papers	1000	_____
25. Decontamination kit	1	_____
26. Radios, portable - radio check with security	6	_____
27. Magnetic car mount antenna	3	_____
28. Radio, stationary - radio check with security - log book entry.	1	_____
29. Full face respirator with charcoal filter - inspect mask, mark bag with inspection date and initials, check filter expiration date	22	_____
30. Voice emitters for respirators - operational check	13	_____
31. Contaminated clothing & waste containers, 55 gal drum	2	_____
32. Anti - contamination clothing, sets	25	_____
33. Step off pads	10	_____
34. Tape, rolls	1 BOX	_____
35. Plastic bags, poultry	1 BOX	_____
36. Plastic bags, clean, large	20	_____
36. Radioactive material bags, yellow, large	1 Roll	_____
37. Radiation rope	1 Roll	_____
38. Radiation hazard signs with inserts	10	_____

- | | | |
|--|----|-------|
| 39. Thyroid block tablets, bottles | 25 | _____ |
| 40. Pens and pencils | 10 | _____ |
| 41. Batteries, D size | 10 | _____ |
| 42. Extension cord | 3 | _____ |
| 43. Intercom "A" - communication check with Control Room.
Call Control Room on GAI page, have them plug in
Intercom A and contact survey center | 1 | _____ |
| 44. NRC Red telephone - lift receiver, tell party "This is
a Ginna Station Survey Center Communications Check". | 1 | _____ |
| 45. New York State Red telephone - Push button, lift
receiver wait 10 seconds, ask if New York State,
Wayne County, Monroe County are listening? Tell
them "This is Ginna Station Survey Center
Communications Check". | 1 | _____ |
| 46. Telephone books - Rochester 1, Wayne County 1 | 1 | _____ |
| 46. Telephone communications link check - call | | |
| 47. Wayne County (9-1-95-4878) | 1 | _____ |
| 48. Monroe County (71-9-473-0710) | 1 | _____ |
| 49. New York State (518-457-2200) | 1 | _____ |
| 50. National Weather Service, Rochester (716-328-7633) | 1 | _____ |
| 51. National Weather Service Buffalo (716-632-2223) | 1 | _____ |
| 52. From 524-6711 call Control Room at 524-4984 and TSC
at 524-4973 | 1 | _____ |
| 53. From extension 331 call TSC at 280 | 1 | _____ |
| 54. From extension 332 call TSC at 281 | 1 | _____ |
| 55. From extension 333 call ESC at 207 | 1 | _____ |

Initials _____ Date _____

APPENDIX "A" (continued)SITE EMERGENCY EQUIPMENT PER SURVEY BOX

If box is sealed inventory not required. Boxes shall be opened in January and July for battery change and inventory.

1. Coveralls	2	_____
2. Hoods, disposable	2	_____
3. Gloves, pair	2	_____
4. Booties, pair	2	_____
5. Hats, Surgeon	2	_____
6. Hoods, Rain	2	_____
7. Coats, Rain	2	_____
8. Boots, Rain, pair	2	_____
9. Suits, cold weather (carhart)	2	_____
10. Equipment Belts with Bags (On-Site team only)	2	_____
11. Flashlight with Batteries	1	_____
12. Plastic Bags	2	_____
13. Masking Tape, rolls	2	_____
14. Pencils	2	_____
15. Pencil Sharpener	1	_____
16. Tablet, writing	1	_____
17. Survey Route Maps	2	_____
18. Air Sampler Filters - Particulate	2	_____
19. Air Sampler Filters - Silver Zeolite GY-130	2	_____
20. Air Sample Envelopes (Iodine)	10	_____
21. Air Sample Envelopes (Environmental)	10	_____

APPENDIX "A" cont.

- | | |
|---|----------|
| 22. Dimes for Telephones (Off-site team only) | 10 _____ |
| 23. Clipboard | 1 _____ |
| 24. Appropriate procedure for team (Remove survey route instructions in Appendix III that do not apply to that survey team) | _____ |
| 25. Hammer and 10 nails (off-site only) | 1 _____ |
| 26. Thyroid Block tablets (bottle) | 1 _____ |
| 27. HP-190 window clamp (off-site teams only) | 1 _____ |
| 28. WB key | |
| 29. First Aid Room key (on-site team only) | |

Initials _____ Date _____

APPENDIX "B"SITE EMERGENCY EQUIPMENTCONTROL ROOM

1. Scott Air Pack (SCBA) - monthly inspection	2	_____
2. High range dosimeters - calibration check	10	_____
3. Dosimeter charger with battery - operability check	1	_____
4. High range dose rate meter - battery check, source check calibration check	1	_____
5. Plant radiation survey maps (sets)	3	_____
6. Smear papers	100	_____
7. Envelopes for smear papers	10	_____
8. Thyroid block tablets (bottle)	1	_____
9. Air sampler, low volume - operability check, calibration check	1	_____
10. Air sampler filters - particulate	3	_____
11. Air sampler filters - silver zeolite	3	_____
12. Radiation monitor RM-14 or equivalent with HP-190 probe	1	_____
13. Tape, roll	1	_____
14. Anti-contamination clothing (sets)	6	_____

APPENDIX "C"SITE EMERGENCY EQUIPMENT

Operational Support Center - Health Physics Office - Auxiliary Building

OPERATIONAL SUPPORT CENTER

- | | |
|--|---------|
| 1. Fill face respirators - inspect mask and mask bag with inspection date and initials | 6 _____ |
| 2. Respirator charcoal filters - expiration date | 6 _____ |
| 3. Anti-contamination clothing (sets) | 6 _____ |
| 4. Flood lights, portable - operational check | 2 _____ |

Initials _____ Date _____

AUXILIARY BUILDING

- | | |
|--|---------|
| 1. Scott air pack (SCBA) - monthly inspection | 1 _____ |
| 2. High range dose rate meter - battery check, source check, calibration check | 1 _____ |

HEALTH PHYSICS OFFICE

- | | |
|--|----------|
| 1. Scott air pack (SCBA) - monthly inspection | 5 _____ |
| 2. High range dosimeter - calibration check | 20 _____ |
| 3. Anti-contamination clothing (sets) | 20 _____ |
| 4. High range dose rate meter - battery check, source check, check calibration | 5 _____ |

Initials _____ Date _____

APPENDIX DSITE EMERGENCY EQUIPMENT

TECHNICAL SUPPORT CENTER

1. Radiation monitor RM-14 or equivalent with HP-190 probe battery check, source check, check calibration	1	_____
2. Area radiation monitor - battery check, source check, check calibration	1	_____
3. Full face respirator - inspect mask mark bag with inspection date and initials	10	_____
4. Respirator charcoal filter - check exp	10	_____
5. Thyroid block tablets (bottles) check expiration date	25	_____
6. Dosimeter, 500mr - check calibration	25	_____
7. Dosimeter, high range - check calibration	10	_____
8. Dosimeter charger with battery - operability check	1	_____
9. RADECO H-809 B2 air sampler - run 120 minutes	1	_____
10. Air sample filters - particulate	4	_____
11. Air sample filters- silver zeolite	4	_____
12. Anti-contamination clothing (sets)	25	_____
13. Step Off Pads	10	_____
14. Daily exposure records sheets	5	_____
15. Radioactive materials bags (yellow)	5	_____
16. Tape, rolls	5	_____
17. Smear papers	100	_____
18. Envelopes for smears	10	_____
19. Envelopes for particulate air sample	10	_____
20. Envelopes for iodine air samples	10	_____

APPENDIX D cont.

21. Pens and pencils 5ea _____
22. Radio, Portable - radio check with security 4 _____
23. Radio, Stationary - radio check with security - log
book entry 1 _____
24. NRC Red telephone - lift receiver, tell party "This is
a Ginna Station TSC Communication Check".
25. New York State Red telephone - push button, lift receiver,
wait 10 seconds, ask if New York State, Wayne County,
Monroe County are listening? Tell them "This is Ginna
Station TSC Communication Check".
26. HPN telephone- dial selected station to confirm
communication check 1 _____
27. EOF Direct line (63EL5187) Telephone 1 _____
28. Computer, Silent seven-operational check 1 _____

Initials _____ Date _____

APPENDIX "E"SITE EMERGENCY EQUIPMENTMONTHLY INSPECTION LOGDISCREPANCIES NOTEDDISCREPANCIES CORRECTED

Survey Center Date _____ Initials _____

Date _____ Initials _____

Control Room Date _____ Initials _____

Date _____ Initials _____

HP Office Date _____ Initials _____

Date _____ Initials _____

Auxiliary Building Date _____ Initials _____

Date _____ Initials _____

Technical Support
Center Date _____ Initials _____

Date _____ Initials _____

Operational
Support Center Date _____ Initials _____

Date _____ Initials _____

Emergency Plant
Vent Monitor Date _____ Initials _____

Date _____ Initials _____

REVIEWED BY: _____

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-233

REV. NO. 0

SEARCH AND RESCUE OPERATION

TECHNICAL REVIEW

PORC REVIEW DATE 3-24-82

JCBodine
QC REVIEW

J. J. Noon
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-233SEARCH AND RESCUE OPERATION1.0 PURPOSE:

- 1.1 Provide a method for a search and rescue operation.

2.0 REFERENCES:

- 2.1 SC-213 Accountability of Personnel
- 2.2 SC-230 Immediate Entry Procedure
- 2.3 A-7 Procedure for handling illness or injury at Ginna Station

3.0 INSTRUCTIONS:

- 3.1 The Emergency Coordinator will institute a search and rescue operation based upon accountability.
 - 3.1.1 Notify Security to scan area for missing individual(s).
 - 3.1.2 Notify Control Room giving the identity of missing individual(s).
 - 3.1.3 Notify the on-site survey teams to visually scan for the missing individual(s).
- 3.2 The radio communicator in TSC shall notify in-plant survey teams of search and rescue operation.
 - 3.2.1 Should an in-plant survey team discover the missing individual(s):
 - 3.2.1.1 Notify the Radio Communicator in TSC and give assistance as required.
- 3.3 The Search and Rescue team shall commence the operation as follows:
 - 3.3.1 If dispatched from Emergency Survey Center enter site using SC-230 Immediate Entry Procedure.
 - 3.3.2 Obtain identity of individual(s) and:
 - 3.3.3 Obtain appropriate protective clothing, dosimetry meters as recommended by Health Physicist and a radio.
 - 3.3.4 Commence search in last known area and expand in adjacent areas and building until individual is found.

- 3.3.5 Do not enter area where radiation levels are greater than 2 R/hr unless directed by Emergency Coordinator.
- 3.3.6 Upon locating missing individual, notify the Radio Communicator in TSC and commence emergency medical treatment as appropriate per A-7 procedure for handling illness or injury at Ginna Station.

GINNA STATION
UNIT #1
COMPLETED

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

DATE :-

TIME :-

PROCEDURE NO. SC-603

REV. NO. 0

SITE EMERGENCY NOTIFICATION

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodini
QC REVIEW

Burt Smith
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-603SITE EMERGENCY NOTIFICATION1.0 PURPOSE:

- 1.1 Provide information for the activation of the Emergency Response Plan at the Site Emergency Level.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
- 2.2 SC-200 Emergency Response Organization/Responsibilities
- 2.3 NUREG 0654

3.0 INSTRUCTIONS:

- 3.1 During normal working hours steps 3.2 through 3.2.3 may not be necessary.

- 3.2 If you completed SC-602 go to Step 3.4.

Report we have a Site Emergency based on _____ to
the following: (Initiating Condition)

	(Speed Dial)	(Manual Dial)
	Ext. 280	

- | | | | |
|-------|---|------|----------------------|
| 3.2.1 | Plant Superintendent - Bruce Snow | 6410 | 9-1 716-671-
5912 |
| | If not available - Jack Noon | 6425 | 9-1-716-342-
1282 |
| 3.2.2 | Duty Engineer - see operations Plan of Day for phone number. | | |
| 3.2.3 | USNRC Resident Inspector Roy Zimmerman 9-1-716-223-1477. | | |
| 3.3 | Notify Electric Line Operating to begin the Site Contingency Call List SC-605 | | 71-2582. |
| 3.4 | Notify Security to activate Security Personnel Actions During A Radiation Emergency GS-10 ext. 258 or page. | | |

- 3.5 Report information on Plant Status Report Form SC-701 to the following:
- 3.5.1 New York State, Wayne and Monroe Counties, using NYS Hot Line,
 -Press Button Allow 10 seconds
 -Request roll call - New York State
 Wayne County
 Monroe County
 This is Ginna Station
 -Report information.
- If out of order
 - New York State 9-1-518-457-2200 or
 9-1-518-457-6811
 - Wayne County 9-1-946-4878 or
 9-1-589-8636
 - Monroe County 9-1-716-473-0710 or
 9-1-716-428-7200
- 3.5.2 USNRC Operations Officer using NRC RED PHONE (within one hour)
 -when answered on other end report information
 If out of order:
- Commercial Telephone to NRC 9-1-301-492-8111
 Operations Center (via Bethesda Central Office).
- To NRC Operations Center 9-1-301-427-4056
 (via Silver Springs Central Office)
- To NRC Operator 9-1-301-492-7000
 (via Bethesda Central Office).
- 3.6 Report "We have a Site Emergency based on _____ to the
 following: (Initiating Condition)
- 3.6.1 Vice President of Electric and Steam Production
 John Maier Business - 71-2637
 Home -
- 3.6.2 Superintendent of Nuclear Production
 Lee Lang Business - 71-2794
 Home
- 3.6.3 Westinghouse - 9-1-412-256-7844
 Please activate your Emergency Response Plan.
- 3.6.4 INPO - 9-1-404-953-0904
 Please activate your Emergency Response Plan.
- 3.7 If requested by Emergency Coordinator request radiological assistance
 from RAP team, Brookhaven - 9-1-516-282-2200

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-442

REV. NO. 0

MONITORING SITE RADIATION LEVEL BY TLD

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Bodine
QC REVIEW

B. A. Brown
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 6 PAGES

SC-442MONITORING SITE RADIATION LEVEL BY TLD1.0 PURPOSE:

- 1.1 This procedure describes the use of thermo-luminescent dosimeters, TLD, to determine the radiation level at the site boundary and at selected environmental monitoring locations.

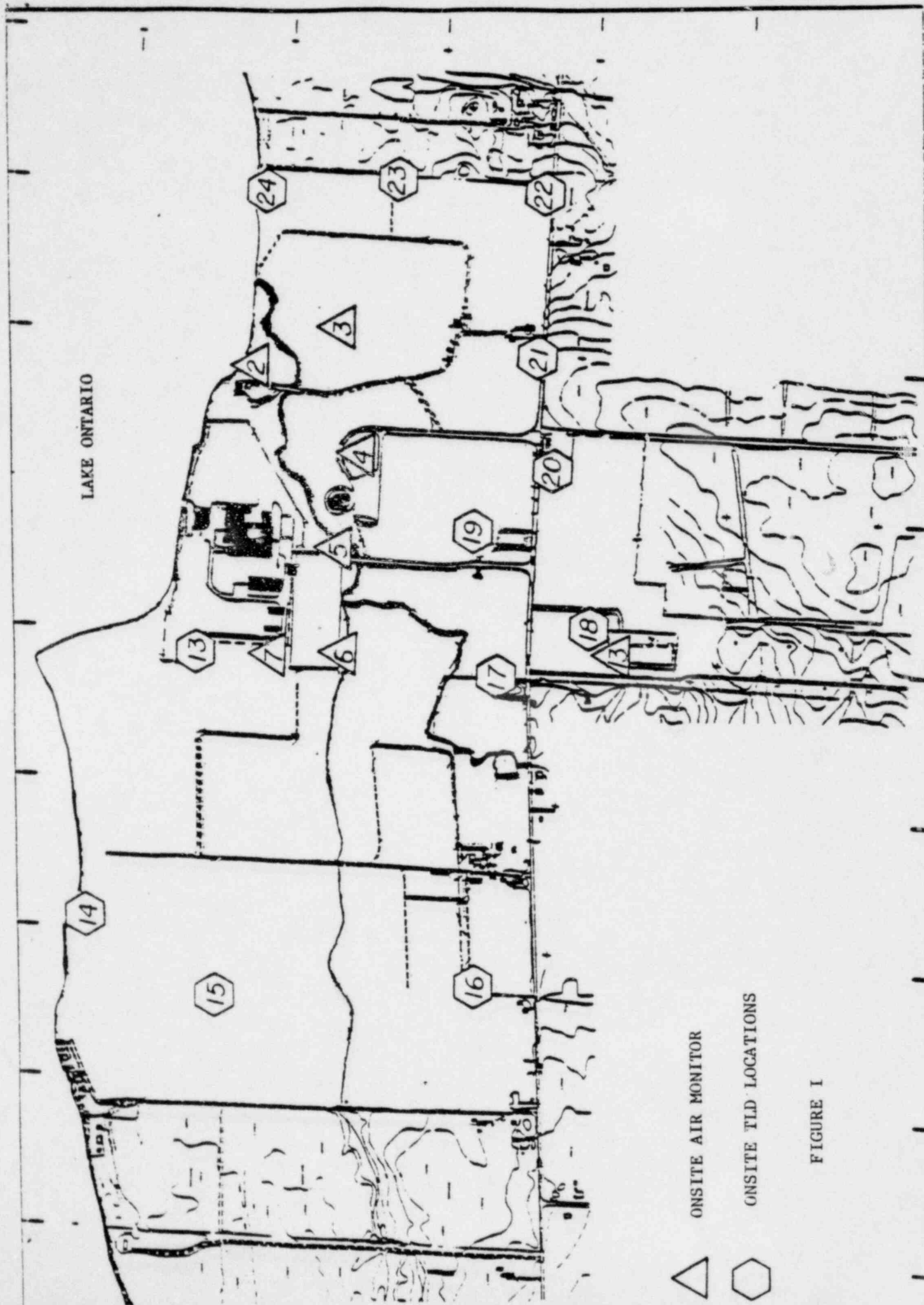
NOTE: All permanently placed TLD's will be changed quarterly and the results used to supplement the environmental report.

2.0 REFERENCES:

- 2.1 Radiation emergency Plan, SC-1
- 2.2 Environmental Chemistry Procedure, ES-7.2

3.0 INSTRUCTIONS:

- 3.1 Environmental TLD's are placed at the locations shown on attached maps and Tables I and II. Table III gives locations at which survey teams will place TLD's as given in procedures SC-323 and SC-324 as directed by the Emergency Coordinator.
- 3.2 Several TLD chips are included in each badge so that the dose for various periods of exposure can be compared.
- 3.3 The Emergency Coordinator may designate individuals to collect TLD's as deemed necessary to evaluate the radiation doses to the environs. Dose after 4 hours, 1 day and 1 week are significant.
- 3.4 TLD's badges or individual chips may be collected by the site survey teams during their surveys in the area of monitoring stations if directed by Emergency Coordinator or Health Physicist.
- 3.5 Individual chips should be placed in a labeled envelope for later identification when read.
- 3.6 Procedure for reading TLD's is found in ES-7.2.
- 3.7 Chips should be replaced as soon as practical so that monitoring can be continued.
- 3.8 TLD's placed at offsite locations by survey teams will be collected and read as directed by the Emergency Coordinator or Health Physicist.



ON-SITE AIR MONITOR

ON-SITE TLD LOCATIONS

FIGURE 1

- TLDs PERMANENTLY PLACED
- TLDs PLACED BY SURVEY TEAMS

FIGURE II

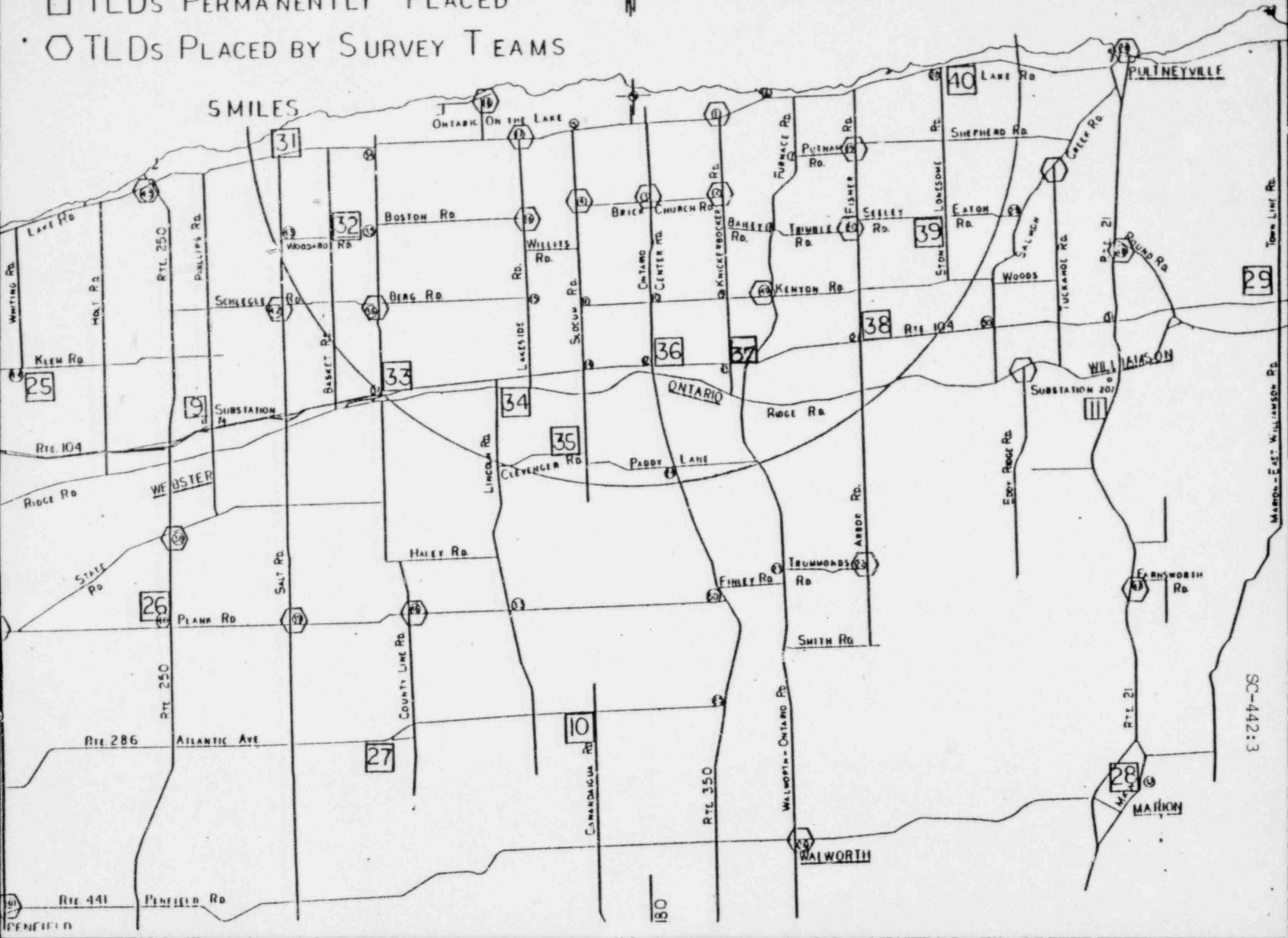


TABLE I

ON SITE ENVIRONMENTAL TLD LOCATIONS

- #2 - Air Sampler, East side of Manor House
- #3 - Air Sampler in Field, 300' Southeast of Manor House
- #4 - Air Sampler in Info. Center Circle
- #5 - Air Sampler by Plant Road Bridge
- #6 - Air Sampler Southwest of Parking Lot
- #7 - Air Sampler along West Plant Fence in Orchard
- #13- West Fence at corner of West Extension of Plant Restricted Area Fence
- #14- Steel Stake, Northwest Corner, North End of Field by lake shore
- #15- Steel Stake, Field Access Road, West Side of Orchard, 3000' West of Plant
- #16- Steel Stake, Southwest corner of Orchard, 3000' West of Plant, 200' North of Lake Road
- #17- Power Pole in orchard - 75' North of Lake Road, 30' East of Vanderweel & RG&E property line.
- #18- Steel Stake, 30' North of Northeast Corner of 13A fence line
- #19- Steel Stake, 100' East of Plant Road, behind house
- #20- Steel Stake South Side Lake Road, 200' West of Ontario Center Road
- #21- Steel Stake, 200' East of Ontario Center Road, North side of Lake Road
- #22- Steel Stake, Southeast property corner
- #23- Steel Stake, East property line, midway between Lake Road and Lake Ontario
- #24- Steel Stake, Lakeshore near Northeast corner of property

TABLE II

PERMANENT OFF SITE POST ACCIDENT TLD LOCATIONS

- #8 Topper Dr. - Irondequoit, Substation #51, near Sea Breeze
- #9 Phillips Rd. - Webster, Substation #74, at intersection with Route 104
- #10 Atlantic Ave. - Walworth, Substation #230, RG&E Rightaway
- #11 W. Main St. - Williamson, Substation #207, behind business buildings
- #12 Seaman St. - Sodus Point, Substation #209
- #25 Klem Rd. - Webster, Substation #75, between Whiting and Five Mile Line
- #26 Plank Rd. - RG&E Service Center, West of Intersection with Route 250
- #27 Atlantic Ave. - Penfield, Pole #338, West of Wayne-Monroe County Line
- #28 N. Main St. - Marion, Substation #193, behind Stanton Ag. Service Bldgs.
- #29 Town Line Rd. - Williamson, Substation #208, N. of Railroad tracks
- #30 State St. - Sodus, District Office, near fuel pumps
- #31 Lake Rd. - Webster, Pole, N. side of road, 500' E. of intersection with Salt Rd.
- #32 Woodard Rd. - Webster, Pole, 150' E. of intersection with Basket Rd.
- #33 County Line Rd. - Ontario, Pole, 100' E. of road along railroad tracks
- #34 Lincoln Rd. - Ontario, Pole, between Ridge Rd. and Route 104
- #35 Clevenger Rd. - Pole on RG&E rightaway
- #36 Route 104 - Ontario, Substation #205, 500' E. of intersection with Route 350
- #37 Railroad Ave. - Ontario, Pole in front of 2048
- #38 Fisher Rd. - Williamson, Pole N. of railroad tracks, E. of road
- #39 Seeley Rd. - Williamson, Pole, #15745, West of intersection with Stony Lonesome Rd.
- #40 Lake Rd. - Williamson, S.E. corner, Intersection with Stony Lonesome Rd.

TABLE III
POST ACCIDENT TLD LOCATIONS PLACED BY SURVEY TEAMS
BY CROSSROADS DESIGNATION

1. Lake Road and Knickerbocker Road
2. Knickerbocker Road and Brick Church Road
3. Ontario Center Road and Brick Church Road
4. Slocum Road and Brick Church Road
16. Lakeside Road and Boston Road
17. Lake Road and Lakeside Road
18. Roder Parkway and Ontario Drive
19. Fisher Road and Shepherd Road
20. Fisher Road and Trimble Road
22. Arbor Road and Trummonds Road
26. Walworth
28. Pultneyville
36. County Line Road and Berg/Schlegel Road
38. State Road and Route 250
39. Plank Road and Salt Road
41. Penfield Road (Route 441) and Five Mile Line Road
42. Salt Road and Schlegel Road
45. Lake Road and Route 250
46. Plank Road and County Line Road
47. Route 21 and Farnsworth Road
48. Route 21 and Pound Road
49. Kenyon Road and Furnace Road
51. Plank Road and Five Mile Line Road
- Eddy Ridge Road and Ridge Road
- Tuckahoe Road and Salmon Creek Road

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-421

REV. NO. 0

DETERMINATION OF IODINE OR PARTICULATE ACTIVITY

TECHNICAL REVIEW

PORC REVIEW DATE 3-31-82

J. G. Hines
QC REVIEW

B. B. Shaw
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X N. V-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 6 PAGES

SC-421DETERMINATION OF IODINE OR PARTICULATE ACTIVITY1.0 PURPOSE:

- 1.1 The determination of the iodine concentration so as to relate to inhalation resultant thyroid dose is extremely important during the first 2 hours after a release. The information is required with as little delay as possible. Therefore, the procedure consists of rapid sample collection and preliminary analysis of the particulate filters and iodine cartridges in the field.

2.0 REFERENCES:

- 2.1 Radiation Emergency Plan, SC-1

3.0 INSTRUCTIONS:

- 3.1 The following equipment will be available.
- 3.1.1 Combination particulate filter and cartridge holders.
- 3.1.2 Glass fiber filters, 50 mm, Gelman Type A/E or equivalent.
- 3.1.3 Silver zeolite cartridge for iodine collection, Science Applications, Inc. Type GY-130 or equivalent.
- 3.1.4 Battery operated count rate meter, 0 - 50,000 cpm, audible alarm, rechargeable, Eberline model RM-14 or equivalent.
- 3.1.5 End window GM probe, alpha, beta, gamma sensitive, Eberline model HP-190 or equivalent.
- 3.1.6 Off-site team air sampler, approximately 1.5 cfm flow rate using a glass fiber and silver zeolite cartridge, battery operated 12 volt, RADECO model H-809C or equivalent.
- 3.1.7 On-site team low volume air sampler, battery operated, volume totalizer, rechargeable, 5 lpm flow rate, Siersat model or Victoreen model 08-430, or equivalent.
- 3.1.8 Emergency Survey Center samplers, battery operated, rechargeable, timer, approximately 1.5 cfm using a glass fiber filter and silver zeolite cartridge, RADECO model H-809 B2 or equivalent.

3.2 Off-Site Team Sampling:

- 3.2.1 Install glass fiber filter and silver zeolite cartridge in the filter holder for the H-809C sampler.
- 3.2.2 Screw filter holder into H-809C sampler.
- 3.2.3 Put on/off switch into "off" position.
- 3.2.4 Connect power cables to 12 bolt battery, red clamp to positive terminal and black clamp to ground.
- 3.2.5 Turn on sampler and record start time and flow rate in cfm (in the field record on back of survey sheet).
- 3.2.6 Allow sampler to run for approximately ten minutes, shut off sampler and record stop time.
- 3.2.7 Determine the cubic feet of air sampled as follows:

$$\underline{\hspace{1cm}} \text{ cfm} \times \underline{\hspace{1cm}} \text{ minutes sampled} = \underline{\hspace{1cm}} \text{ cubic feet}$$
- 3.2.8 Determine the background reading in cpm using the RM-14 and HP-190 probe and record the reading. If background in the area is > 200 cpm, move to an area where the background is < 200 cpm.
- 3.2.9 Remove the particulate filter from the holder, place the HP-190 probe close to but not touching the filter, and record the reading.
- 3.10 Determine the particulate activity as follows:

$$\frac{(\hspace{1cm}) \text{ cpm filter} - (\hspace{1cm}) \text{ cpm background}}{(\hspace{1cm}) \text{ cubic feet}} \times 8.38 \times 10^{-10} = \underline{\hspace{1cm}} \text{ uCi/cc}$$

NOTE: Minimum sensitivity for a 150 cubic foot volume, a 100 cpm net reading, and a probe efficiency of 1.9% is 5.6×10^{-10} uCi/cc.

- 3.11 Remove the silver zeolite cartridge from the holder, place the HP-190 probe against the inlet side of the cartridge and record the cpm reading. If the reading is off scale, determine the iodine activity per Step 3.2.13 instead of Step 3.2.12.
- 3.12 Determine the iodine activity as follows for probe against the cartridge:

$$\frac{(\hspace{1cm}) \text{ cpm cartridge} - (\hspace{1cm}) \text{ cpm background}}{(\hspace{1cm}) \text{ cubic feet}} \times 3.0 \times 10^{-9} = \underline{\hspace{1cm}} \text{ uCi/cc}$$

NOTE: Minimum sensitivity for a 150 cubic foot sample, a 100 cpm net reading and a probe efficiency of 0.52% is 2.0×10^{-10} uCi/cc. This is equivalent to 0.0074 Rem Thyroid (0-2 hour) and 0.06 Rem Thyroid (1 day).

NOTE: The possibility exists that the background may be too high to determine a reading from the cartridge. If this condition exists, move to a lower background area and re-survey the cartridge.

- 3.2.13 Determine the iodine activity as follows for the HP-190 probe one inch (one cartridge thickness) from the inlet side of the cartridge.

$$\frac{(\quad) \text{ cpm cartridge} - (\quad) \text{ cpm background}}{(\quad) \text{ cubic feet}} \times 8.38 \times 10^{-9} = \quad \text{uCi/cc}$$

- 3.2.14 Convert Iodine Concentration to thyroid dose by the following formulas and mark on map.

$$(\text{uCi/cc Iodine}) (3 \times 10^6) = \text{Rem thyroid (0-2 hour)}$$

$$(\text{uCi/cc Iodine}) (3 \times 10^7) = \text{Rem Thyroid (1 day)}$$

- 3.2.15 Place filter and cartridge in the envelope, record the required information on the envelope and save for lab analysis.

3.3 On-site team sampling:

- 3.3.1 Install glass fiber filter and silver zeolite cartridge in the filter holder attached to the low volume sampler.
- 3.3.2 Record location of sample, initial volume totalizer reading and time of start.
- 3.3.3 Turn pump switch to ON. Sample may run throughout the area survey.
- 3.3.4 Record time of sampler stopping and volume totalizer reading.
- 3.3.5 Subtract initial totalizer reading from the final reading and multiply by the calibration factor on the sampler to obtain the cc's of air sampled.

$$\begin{array}{r} \text{final totalizer} \\ \text{initial totalizer} \\ \hline \text{ } \times \text{ CF} = \text{cc's sampled} \end{array}$$

3.3.6 Determine the background reading in cpm using the RM-14 and HP-190 probe and record the reading. If the background in the area is > 200 cpm, move to an area where the background is < 200 cpm.

3.3.7 Remove the particulate filter from the holder, place the HP-190 probe close but not touching the filter and record the cpm reading.

3.3.8 Determine the particulate activity as follows:

$$\frac{(\quad) \text{ cpm filter} - (\quad) \text{ cpm background}}{(\quad) \text{ cc volume}} \times 2.4 \times 10^{-5} = \underline{\quad} \text{ uCi/cc}$$

NOTE: Minimum sensitivity for a 30 minute sample at 5 lpm, a 50 cpm net reading, and a probe efficiency of 1.9% is 8.0×10^{-9} uCi/cc.

3.3.9 Remove the silver zeolite cartridge from the holder, place the HP-190 probe against the inlet side of the cartridge and record the cpm reading.

3.3.10 Determine the iodine activity as follows:

$$\frac{(\quad) \text{ cpm cartridge} - (\quad) \text{ cpm background}}{(\quad) \text{ cc volume}} \times 8.34 \times 10^{-5} = \underline{\quad} \text{ uCi/cc}$$

NOTE: Minimum sensitivity for a 30 minute sample at 5 lpm, a 50 cpm net reading and a probe efficiency of 0.52% is 2.8×10^{-8} uCi/cc.

NOTE: The possibility exists that the background may be too high to determine a reading from the cartridge. If this condition exists, move to a lower background area and re-survey the cartridge.

3.3.11 Place the filter and cartridge in the envelope, record the required information on the envelope and save for lab analysis.

3.4 Emergency Survey Center and Technical Support Center Sampling:

3.4.1 Install glass fiber filter and silver zeolite cartridge in the filter holder for the H-809 B2 sampler.

3.4.2 Screw filter holder into H-809 B2 sampler.

3.4.3 Move sampler to desired location.

3.4.4 Set timer to 10 minutes.

3.4.5 Start sampler and record time and flow rate in cfm. The sampler will automatically shut off in 10 minutes.

3.4.6 Determine the cubic feet of air sampled as follows:

_____ cfm x 10 minutes sampled = _____ cubic feet

3.4.7 Determine the background reading in cpm using the RM-14 and HP-190 probe and record the reading. If the background in the area is > 200 cpm, move to an area where the background is < 200 cpm.

3.4.8 Remove the particulate filter from the holder, place the HP-190 probe close to but not touching the filter, and record the cpm reading.

3.4.9 Determine the particulate activity as follows:

$$\frac{(\quad) \text{ cpm filter} - (\quad) \text{ cpm background}}{(\quad) \text{ cubic feet}} \times 8.38 \times 10^{-10} = \text{_____ uCi/cc}$$

NOTE: Minimum sensitivity for a 150 cubic foot volume, a 100 cpm net reading, and a probe efficiency of 1.9% is 5.6×10^{-10} uCi/cc.

3.4.10 Remove the silver zeolite cartridge from the holder, place the HP-190 probe against the inlet side of the cartridge and record the cpm reading. If the reading is off-scale, determine the iodine activity per 3.4.12 instead of Step 3.4.11.

3.4.11 Determine the iodine activity as follows for probe against the cartridge:

$$\frac{(\quad) \text{ cpm cartridge} - (\quad) \text{ cpm background}}{(\quad) \text{ cubic feet}} \times 3.0 \times 10^{-9} = \text{_____ uCi/cc}$$

NOTE: Minimum sensitivity for a 150 cubic foot sample, a 100 cpm net reading and a probe efficiency of 0.54% is 2.0×10^{-9} uCi/cc. This is equivalent to 0.0074 Rem thyroid (0-2 hour) and 0.06 Rem Thyroid (1 day).

NOTE: The possibility exists that the background may be too high to determine a reading from the cartridge. If this condition exists, move to a lower background area and re-survey the cartridge.

3.4.12 Determine the iodine activity as follows for the HP-190 probe one inch (one cartridge thickness) from the inlet side of the cartridge.

$$\frac{(\quad) \text{ cpm cartridge} - (\quad) \text{ cpm background}}{(\quad) \text{ cubic feet}} \times 8.38 \times 10^{-9} = \text{_____ uCi/cc}$$

- 3.4.13 Place the filter and cartridge in an envelope marked with the time of sample, cubic feet sampled, and location and save for lab analysis.
- 3.5 For more accurate results, analysis may be performed in the plant environmental lab with the GeLi and multichannel analyzer per PC-1.4.

GINNA STATION
UNIT #1
COMPLETED

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

DATE :-

TIME :-

CONTROLLED COPY NUMBER _____

PROCEDURE NO. SC-430

REV. NO. 0

ADMINISTRATION OF POTASSIUM IODIDE

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Polini
QC REVIEW

B. Schneider
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-430ADMINISTRATION OF POTASSIUM IODIDE1.0 PURPOSE:

- 1.1 The purpose of this procedure is to delineate the conditions under which potassium iodide (KI) is to be used and the method by which it is issued.

2.0 REFERENCES:

- 2.1 None

3.0 INSTRUCTIONS:

- 3.1 THYRO-BLOCK is the trade name for KI as distributed by Cater-Wallace, Inc. Each tablet contains 130 mgs of KI and is supplied in bottles of 14 tablets or enough for 10 days dosage of 1 tablet per day. If KI is taken it will block the thyroid gland, which reduces the chance that radioactive iodine will be taken up by the thyroid gland if an individual is exposed.

The recommended dose, taken immediately before exposure or within the first hours after exposure is most effective. Therefore, if an exposure to radioactive iodine has occurred or is expected to occur, in order to meet an emergency situation, the Thyro-Block tablets should be taken for 10 days as prescribed. Potassium Iodide (Enseals) may be taken in place of Thyro-Block. One tablet per day for 10 days is the proper dose.

- 3.2 Potassium Iodide tablets should be considered for exposures greater than 20 mpc hours in one day. They may be used if an emergency requires an individual to enter an area of high iodine-131 concentration.
- 3.3 Potassium Iodide tablets may be distributed to emergency survey teams as a prophylactic if they may encounter radioactive iodine.
- 3.4 Potassium Iodide tablets should be issued to the general public only if approved by the New York State Department of Health.
- 3.5 The Supervisor of Health Physics & Chemistry will approve the use of KI by RG&E personnel and control their issuance.
- 3.6 The RG&E Medical Director and the Plant Doctor should be advised if KI are issued. Call Radiation Management Corporation if high exposure is suspected.
- 3.7 As there may be some reaction to KI by individuals allergic to iodine, the use of the KI is voluntary and not required.

3.8 A supply of tablets are available in the:

Technical Support Center
Control Room
First Aid Room
Emergency Survey Center

3.9 Adults and children 1 year of age or older should take one tablet once a day for 10 days. Babies under 1 year of age should be given one-half (1/2) of a crushed tablet each day.

NOTE: Larger doses will not help and may increase the risk of side effects.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-450

REV. NO. 0

POST ACCIDENT ENVIRONMENTAL SAMPLING

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Bolini
QC REVIEW

Budd
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 3 PAGES

SC-450POST ACCIDENT ENVIRONMENTAL SAMPLING1.0 PURPOSE:

- 1.1 In the event of an emergency, the normal environmental sampling program is suspended by a more intensive and specific program of sample collection aimed at determining, as soon as possible, the extent of the emergency and its effect on the environment. This emergency program utilizes the on site and off site continuous monitoring stations. In addition grab samples will be collected from the down wind direction as deemed necessary, such as soil, crops, milk or water. The nature of the emergency and environmental conditions will indicate the extent of sampling and the locations from which samples will be collected.

2.0 REFERENCES:

- 2.1 Radiation Emergency Plan; SC-1

3.0 INSTRUCTIONS:

3.1 Specific Sampling Locations:

- 3.1.1 The particulate filters from the on site environmental monitoring stations will be collected and replaced with a new filter by the monitoring teams during their initial survey. The Emergency Coordinator may send individuals to collect these filters as he deems necessary.
- 3.1.2 Instructions for changing the filters are included inside of each sample station. Figure 1 shows on site air monitoring stations.
- 3.1.3 Fall out and precipitation collectors may be sampled and analyzed before the scheduled time in order to aid in evaluating the releases.
- 3.1.4 A series of thermo-luminescent dosimeters (TLD's) are available and may be collected according to procedure SC-442, Monitoring Site Radiation Level.
- 3.1.5 Milk collection points are shown in Figure 2 from which appropriate sample points should be selected and samples collected.
- 3.2 General Sampling Locations
- 3.2.1 Water samples from Deer Creek and/or Lake Ontario should be taken as appropriate for the type and direction of release.
- 3.2.2 Soil snow, vegetation and crop samples should be selected so as to indicate the extent and degree of radioactive contamination. Changes in wind and weather conditions may require re-evaluation of the sample collection points.
- 3.3 All samples should be analyzed as soon as practical.

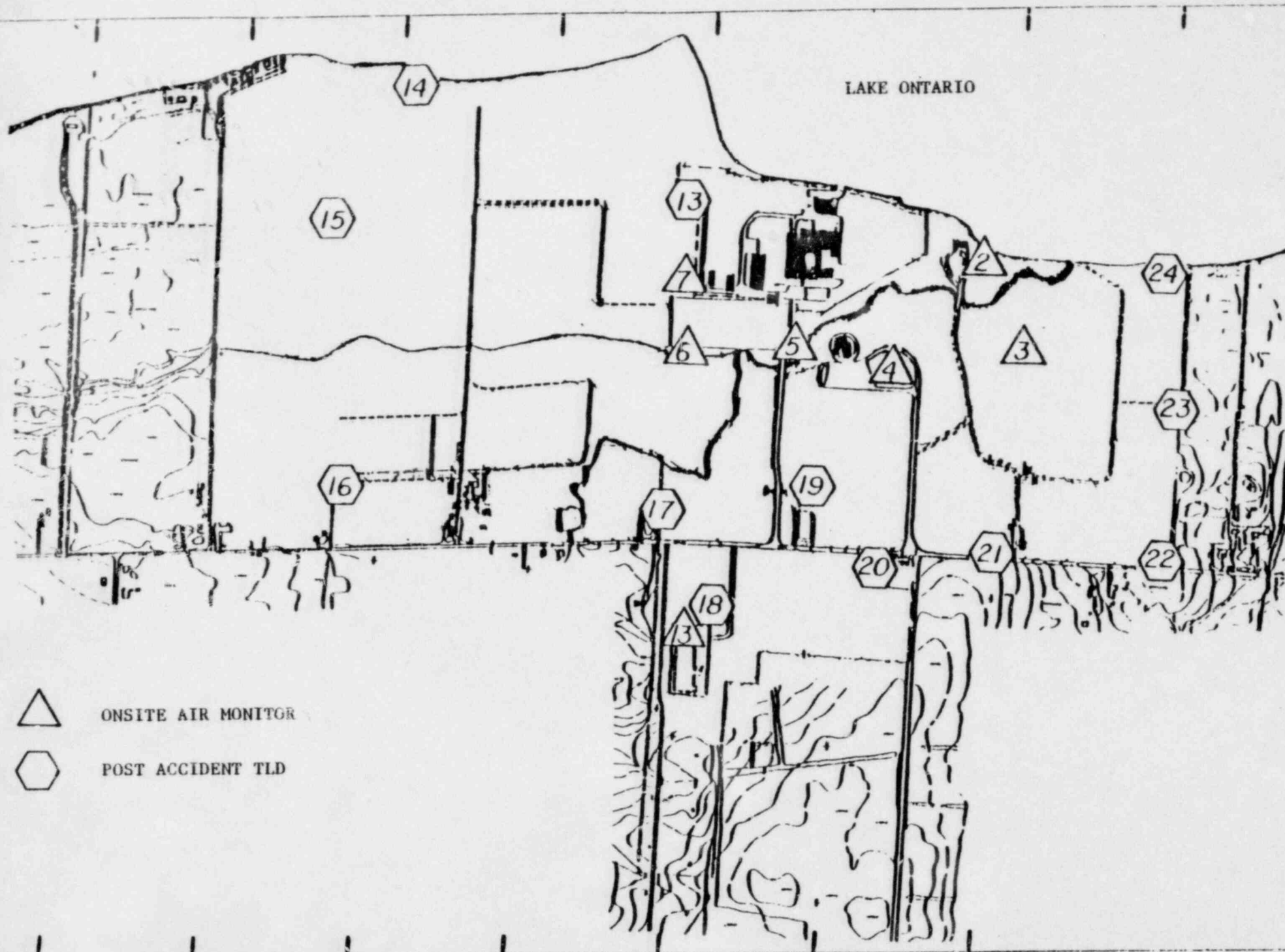
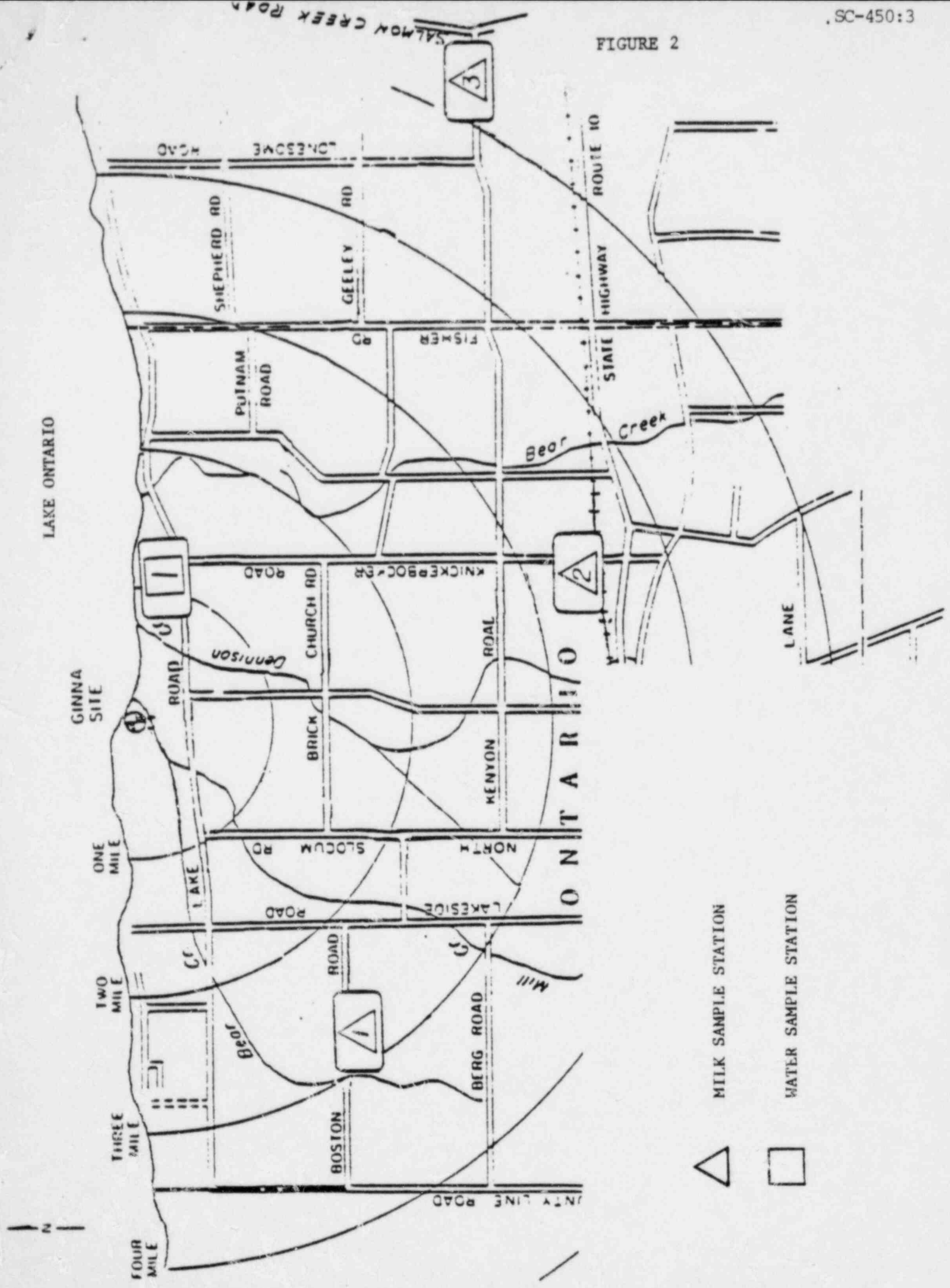


FIGURE 1

FIGURE 2



ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-201

REV. NO. 0

UNUSUAL EVENT

TECHNICAL REVIEW

PORC REVIEW DATE 2-19-82

J. Bodini
QC REVIEW

B. Smith
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 2 PAGES

SC-201UNUSUAL EVENT1.0 PURPOSE:

- 1.1 The purpose of this procedure is to implement the Emergency Plan for an unusual event.

2.0 REFERENCES:

- 2.1 SC-1 Radiation Emergency Plan
2.2 SC-100 Event Classification

3.0 INSTRUCTIONS:

3.1 Immediate Actions

- 3.1.1 Control Room Operator notify the Shift Supervisor
3.1.2 Use appropriate plant procedures to limit or correct condition.
3.1.3 Shift Supervisor report to Control Room and:
- Evaluate Plant Conditions
- Direct the responses of personnel
- Assume the duties of the Emergency Coordinator until relieved.
3.1.4 Notify New York State, Wayne & Monroe Counties, and the NRC Operations Officer using SC-601 within one hour.

3.2 SUBSEQUENT ACTIONS

- 3.2.1 Notify the Plant Superintendent and the Duty Engineer of the event SC-601.
3.2.2 Activate additional emergency response functions as necessary to respond to the event (SC-200 Emergency Response Organization).
3.2.3 Monitor plant conditions for the need to reclassify the event in accordance with SC-100 Event Classification.
3.2.4 Keep New York State, Wayne & Monroe Counties, and the NRC Operations Officer informed.

3.3 CLOSE OUT

- 3.3.1 When the Plant has been stabilized and is in a safe condition, perform a verbal close with New York State, Wayne & Monroe Counties, and the NRC Operations Officer.
- 3.3.2 An A-25.1, or other appropriate report, will be made.
- 3.3.3 A written summary will be submitted to the NRC within 24 hours.

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER _____

GINNA STATION
UNIT #1
COMPLETED

DATE :-

TIME :-

PROCEDURE NO. SC-420

REV. NO. 0

ESTIMATING OFF-SITE DOSES

TECHNICAL REVIEW

PORC REVIEW DATE 4-7-82

J. Bolini
QC REVIEW

Boudreau
PLANT SUPERINTENDENT

4-10-82
EFFECTIVE DATE

QA X NON-QA _____ CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 23 PAGES

SC-420ESTIMATING OFF-SITE DOSES1.0 PURPOSE:

- 1.1 The purpose of this procedure is to provide estimates of the post accident dose in the areas around the plant and guidance for the selection of sampling locations. Information is needed early to decide what action be taken to limit the exposure of the general public. Steps must be taken to define the affected areas, assess the extent and significance of the release and provide data on which appropriate protective actions can be based.

2.0 REFERENCES:

- 2.1 Radiation Emergency Plan, SC-1
- 2.2 N.Y.S. Radiological Emergency Preparedness Plan
- 2.3 SC-100, SC-442, SC-450
- 2.4 PC-23.3, PC-23.4, PC-23.5 and S-14.2
- 2.5 EPA-520, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Feb. 1980).
- 2.6 Regulatory Guide 1.109

3.0 INSTRUCTIONS:

- 3.1 The following equipment is available for use in estimating doses
- 3.1.1 Xu/Q Isopleths, and Xu/Q tabulated values (Table 1).
- 3.1.2 Map of surrounding area, U.S. Geological Survey(1 inch: 24000 inch scale)
- 3.1.3 Control Room wind and temperature indicators
- 3.1.4 Control Room Radiation Monitor System
- 3.1.5 Back-up wind speed and direction indicators at Station 13A, and National Weather Service.
- 3.2 Preliminary Radiological Estimates and Event Classification

- 3.2.1 For initial notification purposes, a first-cut estimate of potential offsite doses and releases may be obtained by the Control Room using SC-240, Attachment II. Levels are provided for various accidents evaluated in the Ginna FSAR and in previous AEC Safety Evaluations for Ginna plant siting and design.
- 3.2.2 It is preferable to base offsite estimates upon measured release values. Vent activity concentrations and release rates can be determined from curves in Procedure S-14.2, and from Procedure PC-23.5. Should vent monitors be inoperable, procedures PC-23.3 and PC-23.4 should be used estimating plant and steam vent releases, respectively.
- 3.2.3 An estimate of the 0-2 hr site boundary whole body dose from plant vent noble gas concentration, obtained from S-14.2 (low range monitor), PC-23.5 (hi range monitor) or PC-23.3 (back-up monitor), may be obtained using the following equation:

$$\text{Plant vent (uCi/cc)} \times 15 \frac{\text{Rem}}{\text{uCi/cc}} = \text{0-2 hr whole body dose Rem at site boundary}$$

NOTE: The following assumptions were made for these calculations:

$X/Q = 5.3 \times 10^{-4} \text{ sec/m}^3$ (default value in lieu of actual meteorology data; assuming downwind mixing conditions 100 times more conservative than annual average conditions).

Plant vent flow = 65,000 cfm ($3.1 \times 10^7 \text{ cc/sec}$)

EPA-520 whole body dose curve ($t = 0\text{hr}$)

- 3.2.4 Determine the classification of the emergency with respect to plant releases and site boundary doses from the following criteria (from SC-1.1A):

<u>RADIOLOGICAL ESTIMATE</u>	<u>CLASSIFICATION</u>
Radiological effluent Technical Specification limits exceeded (T.S.3.9)	Unusual Event
Radiological effluent greater than 10 times Technical Specification limits.	Alert
Effluent monitors indicate levels corresponding to greater than 50 mrem/hr whole body or 0-2 hr. thyroid dose greater than 500 mrem at the site boundary. Or these doses projected based upon plant parameters, or actual offsite measurements.	Site Emergency

Effluent monitors show levels corresponding to 500 mrem/hr whole body or a 0-2 hr. thyroid dose greater than 1 rem. Or these doses indicated by offsite measurements.

General Emergency

- 3.2.5 Any preliminary dose estimates used as a basis for emergency classification or protective action recommendations should be refined as follows using release measurements and actual meteorological and field sampling data as they become available.

3.3 Use of Meteorological and Release Data with EPA Curves to Project Doses

- 3.3.1 Obtain the temperature at 33' and 250' from the "Status Report Form", Control Room, TSC or Computer Terminal. From the 33' temperatures subtract the 250' temperature. If readings from the main weather tower are unavailable, proceed to step 3.3.2.1.

T33' _____

-T250' _____

T _____

- 3.3.2 If ΔT is 2.0 or greater condition is unstable (lapse).

If ΔT is between 0.5 and 2, condition is neutral.

If ΔT is less than .5 or is negative ($T_{250}' > T_{33}'$), condition is stable (inversion).

Condition is _____

- 3.3.2.1 In the event that meteorological data are unavailable from the main weather tower, the Emergency Coordinator should direct an individual to proceed to the back-up weather instrument recorder inside the Station 13A control building. The recorder is located next to the communications desk on the north wall.
- 3.3.2.2 If the primary tower temperature sensors are not available to determine stability, the individual taking the readings should note wind speed (mph) wind direction (degrees) and approximate fluctuation in wind direction (degrees) averaged over the last hour. The wind direction fluctuation is determined by eyeballing or by drawing 2 average lines through the last hour's wind direction extremes, and subtracting the difference.
- 3.3.2.3 Station 13-A wind speed, wind direction and wind direction fluctuation readings are reported to the Technical Support Center by phone (ext. 500 through 507) or by the plant P.A. The individual at Station 13A should request for further instructions from the Emergency Coordinator.
- 3.3.2.4 To determine atmospheric stability from wind fluctuation, use the following table:

Wind FluctuationStability

< 45° anytime	stable (inversion)
> 45° night time	neutral
45°-75° daytime	neutral
> 75° daytime	unstable (lapse)

3.3.3 Select the Xu/Q plastic overlay matching the condition determined in 3.3.2 and attach to the area map. (Also tabulated Xu/Q values are given in the attached Table 1).

3.3.4 Obtain wind speed and direction data from the "Status Report Form", the Control Room, TSC, Computer Terminal or alternatively from Station 13A. The direction given will be that from which the wind is blowing.

Wind Speed _____ (mph)

Wind Direction _____ (degrees)

NOTE: Supplemental weather information is also available from the National Weather Service Offices in Rochester (716-328-7633) or Buffalo (716-632-2223), if necessary.

3.3.5 Align the centerline of the overlay in the downwind direction. The mark on the centerline at the bottom of the overlay should be aligned on a compass point on the map 180 degrees from the degrees given in 3.3.4. To determine this point, do one of the following:

If the degrees given in step 3.3.4 is between 180 and 360, subtract 180.

If the degrees given in step 3.3.4 is between 0 and 180, add 180.

Degrees wind is blowing from _____ Degrees

+ or - 180 Degrees

Align mark on centerline of overlay (at bottom) at _____ Degrees

3.3.6 The Xu/Q plastic overlays and Table 1 values have, for convenience been calculated based upon a wind speed of 1 mph. Thus, in order to determine $\frac{X/Q \text{ sec}}{m^3}$, it is necessary to divide the isopleth value by the actual wind speed, in mph.

- 3.3.7 To calculate the downwind concentration of noble gas, particulates or radioiodine, multiply the release rate of radioactivity (Ci/sec) from the plant times the X/Q (sec/m^3) dispersion coefficient determined in step 3.3.6. The resultant concentration will be in Ci/m^3 or uCi/cc . Perform these calculations on Attachment 1.
- 3.3.8 Obtain an initial estimate of release duration from the Emergency Coordinator or Recovery Manager. If this estimate is unavailable, use an initial release duration estimate of 2 hours for dose projection purposes.
- 3.3.9 Whole body gamma dose is then estimated using Figures 1 through 7, according to the approximate time after shutdown. To estimate gamma dose rate for a given noble gas downwind concentration (right vertical scale) find the corresponding whole body dose rate (mrem/hr) along the left vertical scale.
- 3.3.10 To estimate whole body gamma dose, find the point on the graph where the noble gas concentration line intersects the projected exposure time. The integrated whole body dose is then found along the diagonal lines on the graph.
- 3.3.11 To estimate child and adult thyroid dose, find the point on the Figure 8 graph where the downwind radioiodine concentration line intersects the projected exposure time. The integrated thyroid doses for the adult and child are indicated along the diagonal lines (the child dose being twice the adult's).
- 3.3.12 Correct thyroid dose estimates for time after shutdown, by multiplying by the appropriate factor indicated in Figure 9.

3.4 Survey Team Data

- 3.4.1 Note the sample locations on the map that are covered by the Xu/Q overlay. The initial sample taken should be in a high concentration area and on a first stage survey route. Using the attached list of sample locations and teams, notify proper teams where to take samples. When results are received, mark results on appropriate map and status board.
- 3.4.2 When the initial field sampling results are received, assign a Xu/Q value to the sample results using the Xu/Q value for the line closest to the sample location. For the plastic overlays, all points along a given line are assumed to have the same concentration as the initial sample. The concentration at any other point of interest can be estimated by multiplying the sample concentration by the ratio of the respective Xu/Q values.

EXAMPLE: A sample taken on a Xu/Q line of 5×10^{-6} indicated an iodine concentration of 5×10^{-7} uCi/cc and dose rate of 100 mrem/hr . Determine the concentration and dose rate expected at a Xu/Q value of 2×10^{-7} ?

SOLUTION:

$$\text{Iodine at } 2 \times 10^{-7} = \frac{2 \times 10^{-7}}{5 \times 10^{-6}} \times 5 \times 10^{-7} \frac{\text{uCi}}{\text{cc}} = 2 \times 10^{-8} \frac{\text{uCi}}{\text{cc}}$$

$$\text{Dose Rate at } 2 \times 10^{-7} = \frac{2 \times 10^{-7}}{5 \times 10^{-6}} \times 100 \text{ (mrem/hr)} = 4 \text{ (mrem/hr)}$$

- 3.4.3 Compare measured dose rates and air concentrations to predicted values, and adjust dose projections accordingly.
- 3.4.4 Notify the survey team to continue surveying the affected area looking for high concentration areas and hot spots.
- 3.4.5 If the wind direction changes, realign overlay using 3.3.5. Sample new locations indicated by the overlay.
- 3.4.6 If the wind speed changes, recalibrate the overlay by dividing the original speed by the new wind speed and multiply by the concentration or dose. Resample to check new overlay calibration.
- 3.4.7 For puff type releases multiply wind speed by elapsed time to find distance radioactive cloud has traveled.
- 3.4.8 Environmental TLD's, (SC-442) and Post Accident Environmental Samples, (SC-450) may be used to give better values for off-site doses.
- 3.5 Protective Action Guides
- 3.5.1 Recommend the appropriate measures to be followed with respect to the general public. Table 2, 3 and 4 give the projected whole body and thyroid dose levels which warrant given protective actions (e.g. sheltering, evacuation) indicated.

TABLE I

GINNA SITE VALUES OF $\frac{X_u}{Q}$ AS A FUNCTION
OF STABILITY AND DISTANCE
(computed by Pickard, Lowe & Garrick 1/82)

DOWNWIND DISTANCE			UNSTABLE		NEUTRAL		STABLE	
METERS	FEET	MILES						
200	660	0.1	2.42	E-4	1.17	E-3	2.06	E-3
400	1,310	0.2	1.06	E-4	6.33	E-4	1.42	E-3
600	1,970	0.4	5.88	E-5	4.02	E-4	1.10	E-3
800	2,620	0.5	3.71	E-5	2.80	E-4	8.78	E-4
1,000	3,280	0.6	2.34	E-5	2.13	E-4	7.17	E-4
1,200	3,940	0.7	1.62	E-5	1.68	E-4	5.97	E-4
1,400	4,590	0.9	1.19	E-5	1.36	E-4	5.05	E-4
1,600	5,250	1.0	9.13	E-6	1.12	E-4	4.42	E-4
1,800	5,910	1.1	7.18	E-6	9.45	E-5	3.91	E-4
2,000	6,560	1.2	5.20	E-6	8.22	E-5	3.48	E-4
2,500	8,200	1.6	2.83	E-6	6.02	E-5	2.70	E-4
3,000	9,840	1.9	1.99	E-6	4.67	E-5	2.23	E-4
3,500	11,500	2.2	1.69	E-6	3.76	E-5	1.88	E-4
4,000	13,100	2.5	1.46	E-6	3.10	E-5	1.61	E-4
4,500	14,800	2.8	1.27	E-6	2.60	E-5	1.39	E-4
5,000	16,400	3.1	1.12	E-6	2.21	E-5	1.22	E-4
5,500	18,000	3.4	9.99	E-7	1.91	E-5	1.08	E-4
6,000	19,700	3.7	9.11	E-7	1.68	E-5	9.78	E-5
6,500	21,300	4.0	8.53	E-7	1.52	E-5	8.89	E-5
7,000	23,000	4.3	8.03	E-7	1.38	E-5	8.12	E-5
7,500	24,600	4.7	7.58	E-7	1.25	E-5	7.45	E-5
8,000	26,200	5.0	7.18	E-7	1.15	E-5	6.86	E-5
8,500	27,900	5.3	6.82	E-7	1.05	E-5	6.34	E-5
9,000	29,500	5.6	6.49	E-7	9.72	E-6	5.88	E-5
9,500	31,200	5.9	6.19	E-7	8.99	E-6	5.49	E-5
10,000	32,800	6.2	5.94	E-7	8.40	E-6	5.24	E-5
11,000	36,100	6.8	5.53	E-7	7.50	E-6	4.79	E-5
12,000	39,400	7.5	5.18	E-7	6.74	E-6	4.40	E-5
13,000	42,700	8.1	4.86	E-7	6.09	E-6	4.06	E-5
14,000	45,900	8.7	4.59	E-7	5.54	E-6	3.76	E-5
15,000	49,200	9.3	4.34	E-7	5.50	E-6	3.49	E-5
16,000	52,500	10.0	4.12	E-7	4.63	E-6	3.26	E-5

NOTE: VALUES ARE BASED ON 1 MPH WINDS

TABLE II

PROTECTIVE ACTION GUIDES FOR WHOLE BODY
EXPOSURE TO AIRBORNE RADIOACTIVE MATERIALS

POPULATION AT RISK	PROJECTED WHOLE BODY GAMMA DOSE (REM)
GENERAL POPULATION	1 TO 5 ^(A)
EMERGENCY WORKERS	25
LIFESAVING ACTIVITIES	75

(A) WHEN RANGES ARE SHOWN, THE LOWEST VALUE SHOULD BE USED IF THERE ARE NO MAJOR LOCAL CONSTRAINTS IN PROVIDING PROTECTION AT THAT LEVEL, ESPECIALLY TO SENSITIVE POPULATIONS. LOCAL CONSTRAINTS MAY MAKE LOWER VALUES IMPRACTICAL TO USE, BUT IN NO CASE SHOULD THE HIGHER VALUE BE EXCEEDED IN DETERMINING THE NEED FOR PROTECTIVE ACTION.

TABLE III

PROTECTIVE ACTION GUIDES FOR THYROID DOSE
DUE TO INHALATION FROM A PASSING PLUME

POPULATION AT RISK	PROJECTED THYROID DOSE REM
GENERAL POPULATION	5 - 25
EMERGENCY WORKERS	125
LIFESAVING ACTIVITIES	(A)

(A) No specific upper limit is given for thyroid exposure since in the extreme case complete thyroid loss might be an acceptable penalty for a life saved. However, this should not be necessary if respirators and/or thyroid protection for rescue personnel are available as the result of adequate planning.

TABLE IV

Projected Dose (Rem) to the Population	Recommended Actions(a)	Comments
Whole body <1 Thyroid <5	No planned protective actions.(b) State may issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.	Previously recommended protective actions may be reconsidered or terminated.
Whole body 1 to <5 Thyroid 5 to <25	Seek shelter as a minimum. Consider evacuation. Evacuate unless constraints make it impractical. Monitor environmental radiation levels. Control access.	If constraints exist, special consideration should be given for evacuation of children and pregnant women.
Whole body 5 and above Thyroid 25 and above	Conduct mandatory evacuation. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access.	Seeking shelter would be an alternative if evacuation were not immediately possible.
Projected Dose (Rem) to Emergency Team Workers		
Whole body 25 Thyroid 125	Control exposure of emergency team members to these levels except for lifesaving missions. (Appropriate controls for emergency workers, include time limitations, respirators, and stable iodine.)	Although respirators and stable iodine should be used where effective to control dose to emergency team workers, thyroid dose may not be a limiting factor for lifesaving missions.
Whole body 75	Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective.)	

(a) These actions are recommended for planning purposes. Protective action decisions at the time of the incident must take existing conditions into consideration.

(b) At the time of the incident, officials may implement low-impact protective actions in keeping with the principle of maintaining radiation exposures as low as reasonably achievable.

ATTACHMENT I

RELEASE VENT: _____

TIME/DATE: _____

POST-SHUTDOWN TIME: _____ (hr)

EFFLUENT MONITOR READINGS:

_____ uCi/cc Gas (Monitor No. _____)

_____ uCi/cc Particulate (Monitor No. _____)

_____ uCi/cc Radioiodine (Monitor No. _____)

_____ CFM Vent Flow

(1) To convert CFM to cc/sec

_____ CFM $\times 2.83 \times 10^4$ cc/CFM $\times 1$ min/60 sec = _____ cc/sec

NOBLE GAS:

(2) To calculate release RATE in Ci/sec from monitors

_____ uCi/cc \times _____ cc/sec $\times 10^{-6}$ Ci/uCi = _____ Ci/sec

(3) To predict downwind concentration

$$\frac{\text{_____}}{(Xu/Q)} \frac{\text{sec-mph}}{\text{m}^3} \times \text{_____} \text{ Ci/sec} \times 1/(\text{_____} \text{ mph}) = \text{_____} \text{ uCi/cc at } \text{_____}$$

(windspeed) (distance)

PARTICULATE:

(4) To calculate release RATE in Ci/sec from monitors

_____ uCi/cc \times _____ cc/sec $\times 10^{-6}$ Ci/uCi = _____ Ci/sec

(5) To predict downwind concentration

$$\frac{\text{_____}}{(Xu/Q)} \frac{\text{sec-mph}}{\text{m}^3} \times \text{_____} \text{ Ci/sec} \times 1/(\text{_____} \text{ mph}) = \text{_____} \text{ uCi/cc at } \text{_____}$$

(windspeed) (distance)

RADIOIODINE:

(6) To calculate release RATE in Ci/sec from monitors

_____ uCi/cc \times _____ cc/sec $\times 10^{-6}$ Ci/uCi = _____ Ci/sec

(7) To predict downwind concentration

$$\frac{\text{_____}}{(Xu/Q)} \frac{\text{sec-mph}}{\text{m}^3} \times \text{_____} \text{ Ci/sec} \times 1/(\text{_____} \text{ mph}) = \text{_____} \text{ uCi/cc at } \text{_____}$$

(windspeed) (distance)

EMERGENCY OFF-SITE SAMPLE POINTS

SAMPLE POINT NUMBER	LOCATION	RED	GREEN	ORANGE	RED	GREEN	ORANGE	RED	GREEN	ORANGE
		TEAM			FIRST STAGE			SECOND STAGE		
1	Lake & Knickerbocker	X	X	X	X		X		X	X
2	Brick Church & Knickerbocker	X			X					
3	Brick Church & Ontario Center		X			X				
4	Brick Church & Slocum	X			X					
5	Lake & Slocum	X	X	X	X	X			X	X
6	Bear Creek Harbor		X	X			X		X	
7	Putman & Furnace			X			X			
8	Trimble & Furnace			X			X			
9	Knickerbocker & Kenyon			X			X			
10	Ontario Center Rd. & Kenyon	X	X		X	X				
11	Slocum & Kenyon	X			X					
12	RT-104 & Ontario Center	X	X			X		X		
13	RT-104 & Knickerbocker	X					X			
14	RT-104 & Lakeside		X			X				
15	Berg & Lakeside		X			X				
16	Boston & Lakeside		X			X				
17	Lake & Lakeside		X			X			X	X
18	Ontario-on-the-Lake									X
19	Shepherd & Fisher			X			X			
20	Trimble & Fisher			X			X			X
21	RT-104 & Fisher			X						X
22	Trummonds & Arbor			X						X
23	Trummonds & Walworth-Ontario			X						X
24	RT-350 & Paddy Lane	X						X		
25	RT-350 & RT-286	X						X		
26	WALWORTH	X						X		
27	Stony Lonesome & Lake		X						X	
28	PULTNEYVILLE		X	X					X	X
29	Salmon Creek & Eaton			X						X

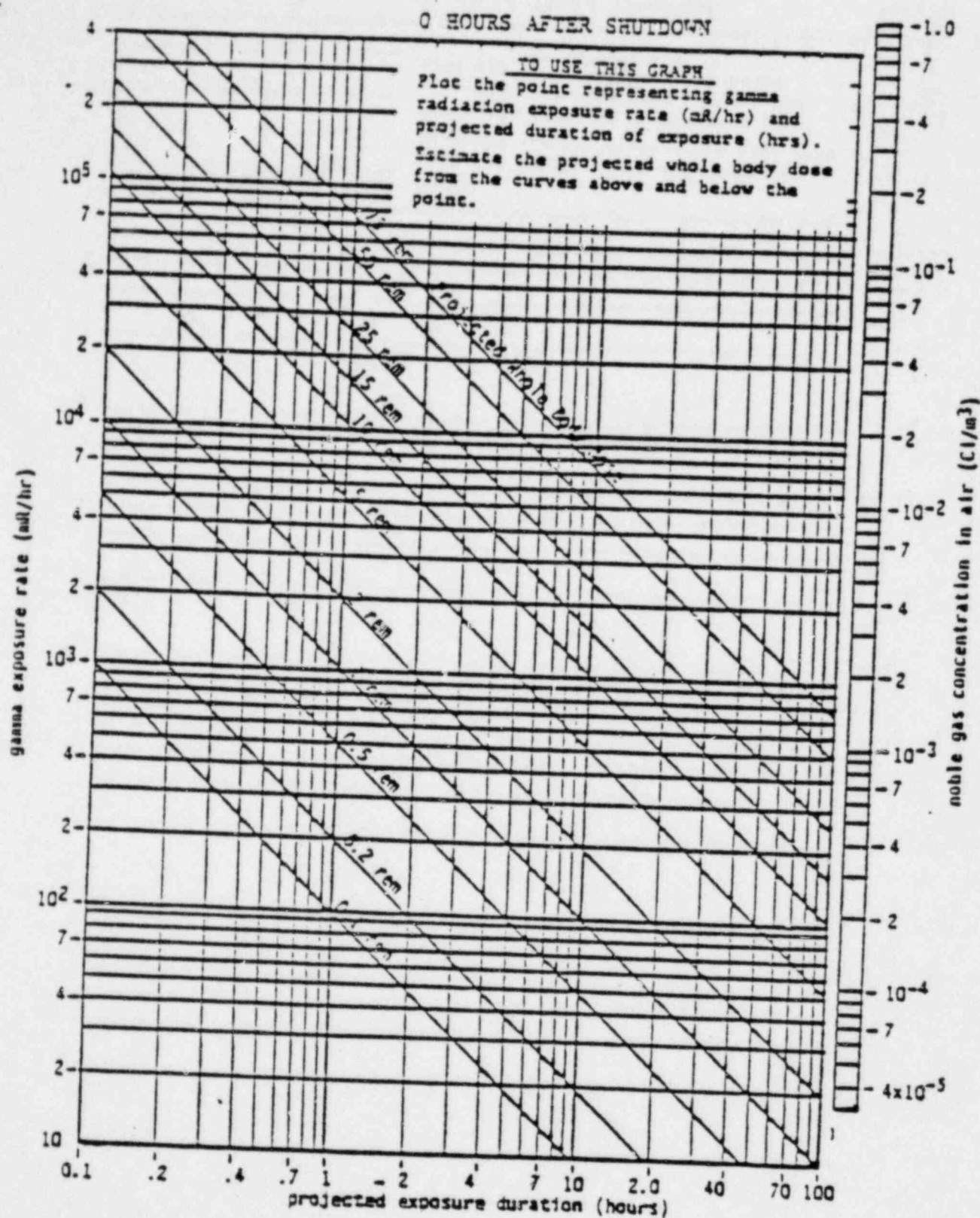


FIGURE 1 Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

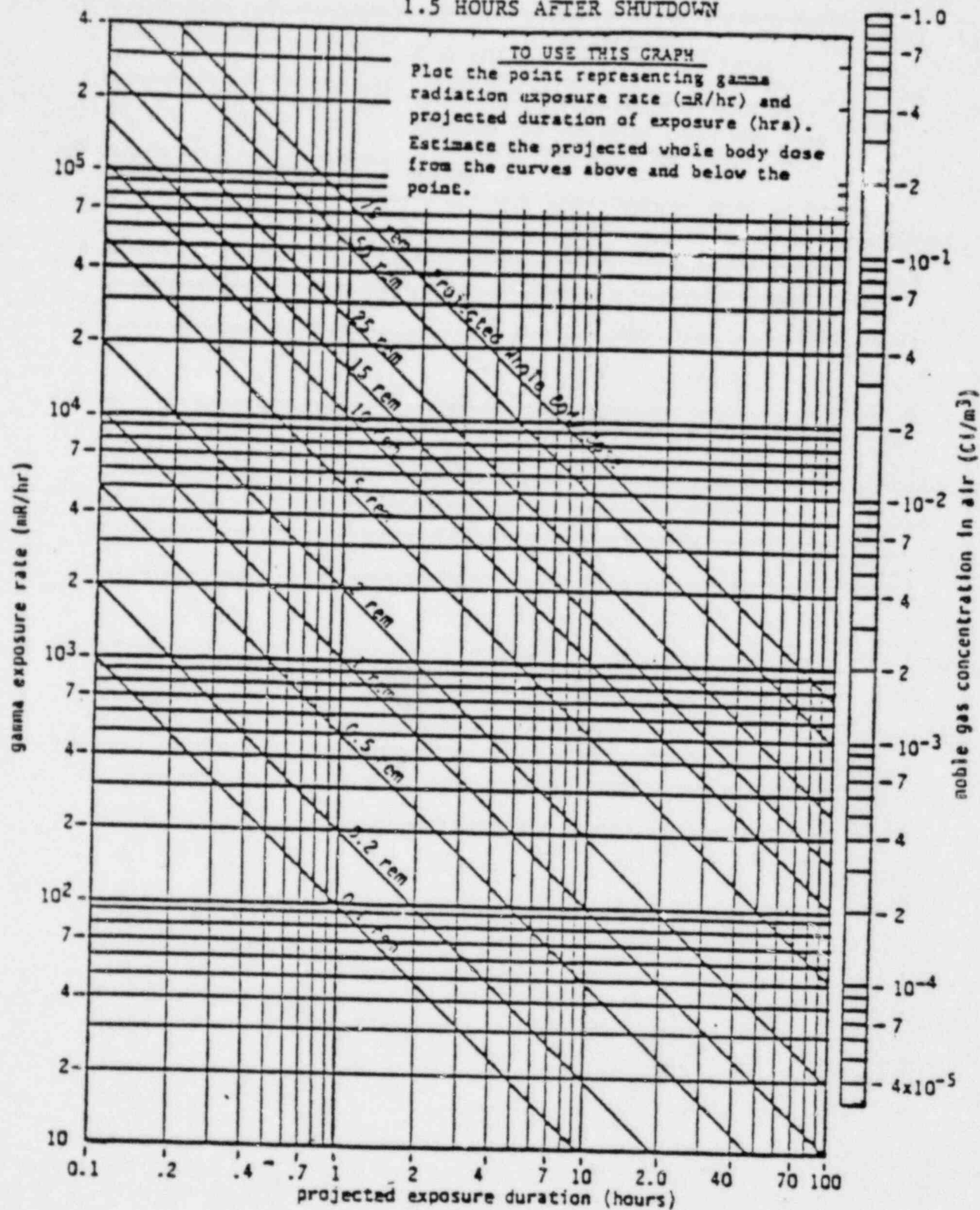


FIGURE 2 Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

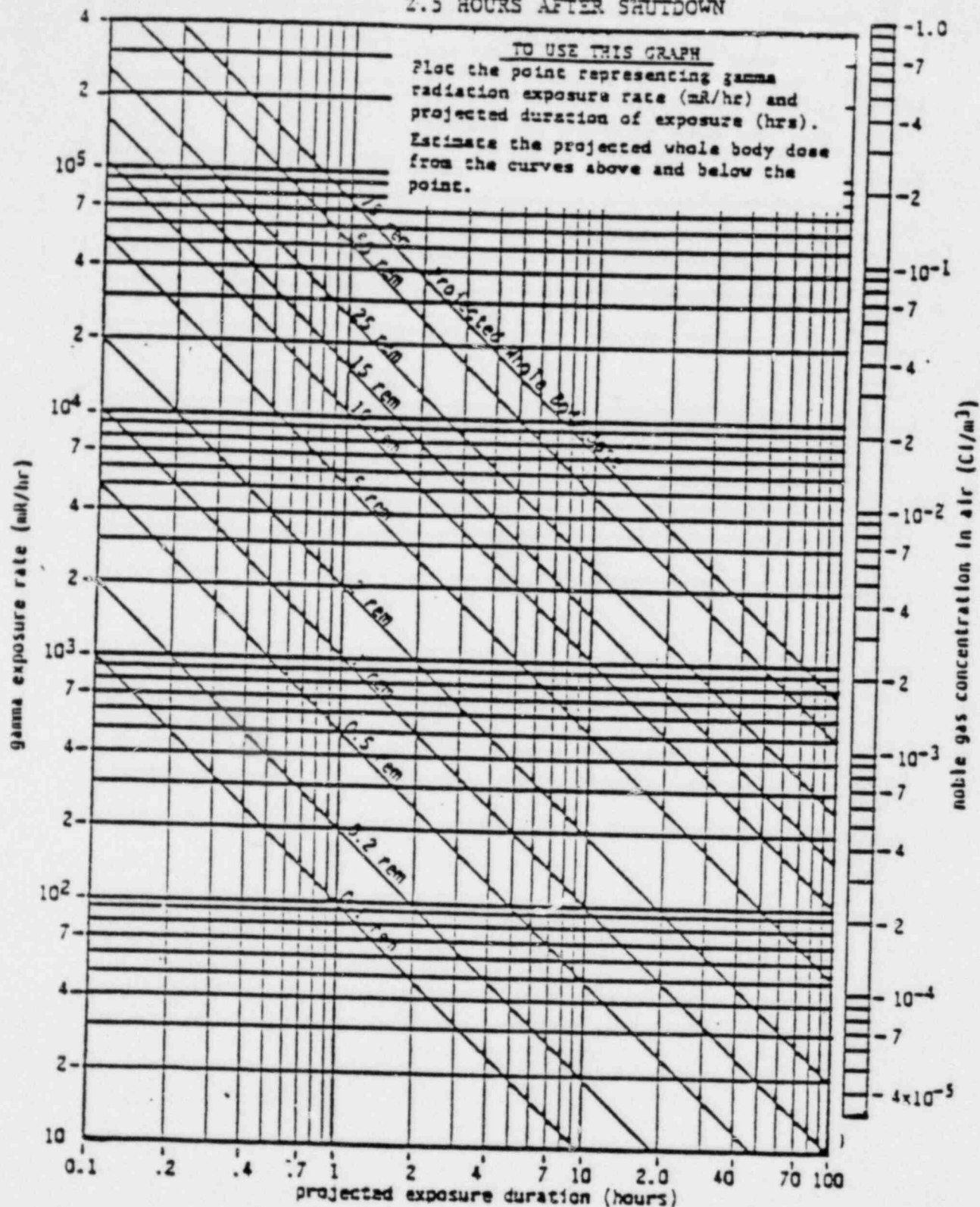


FIGURE 3 Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure



FIGURE 4 Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

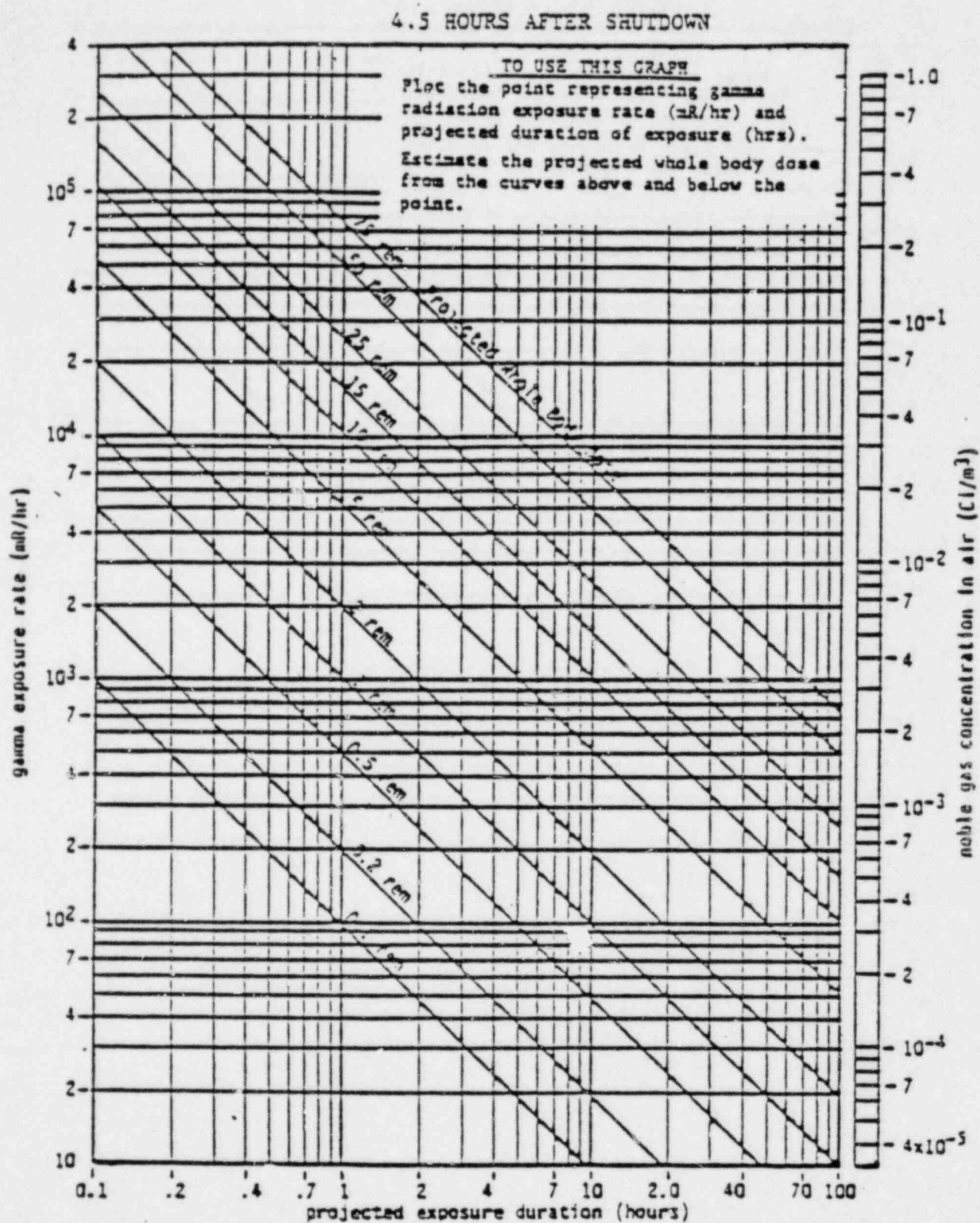


FIGURE 5 Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

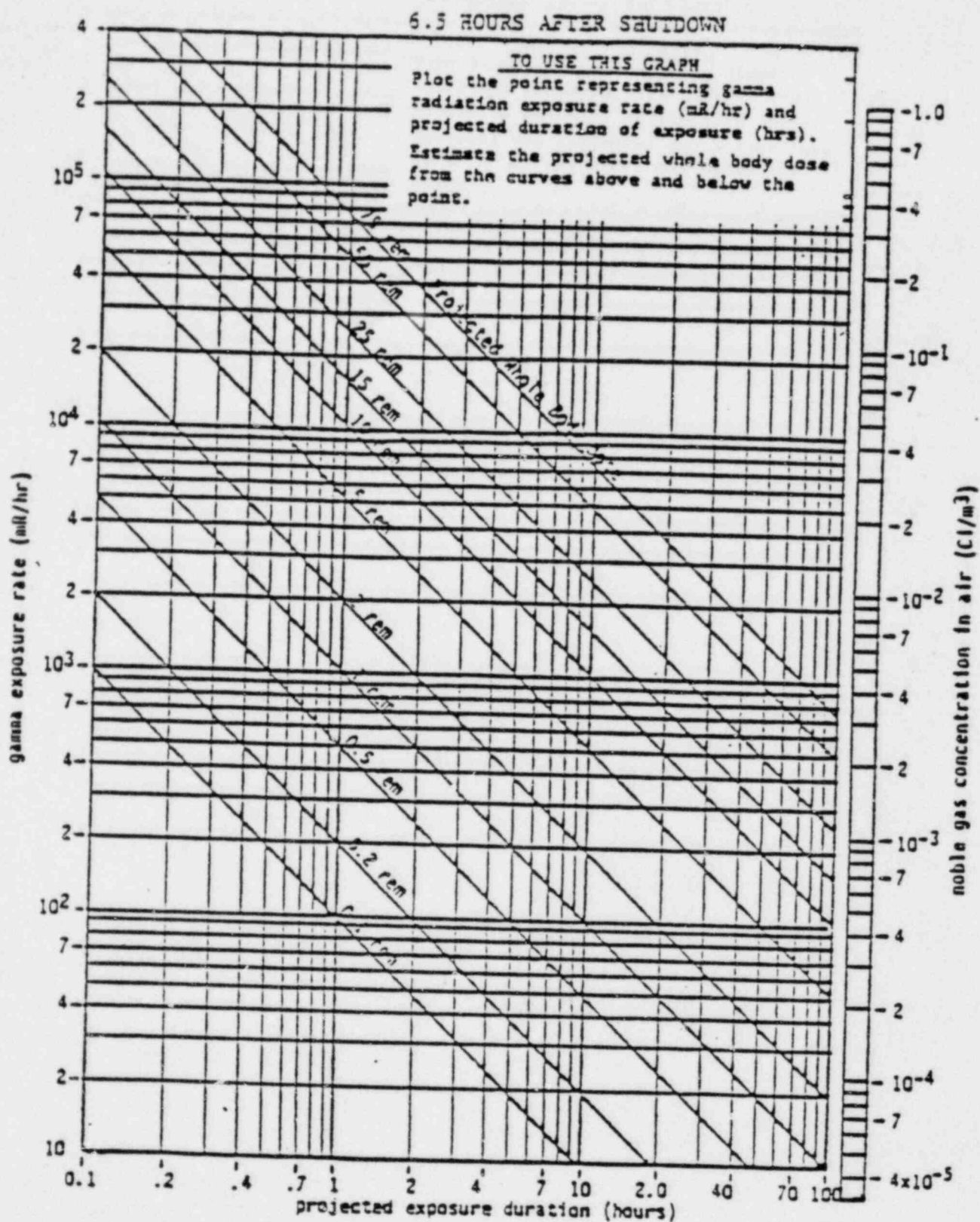


FIGURE 6 . Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

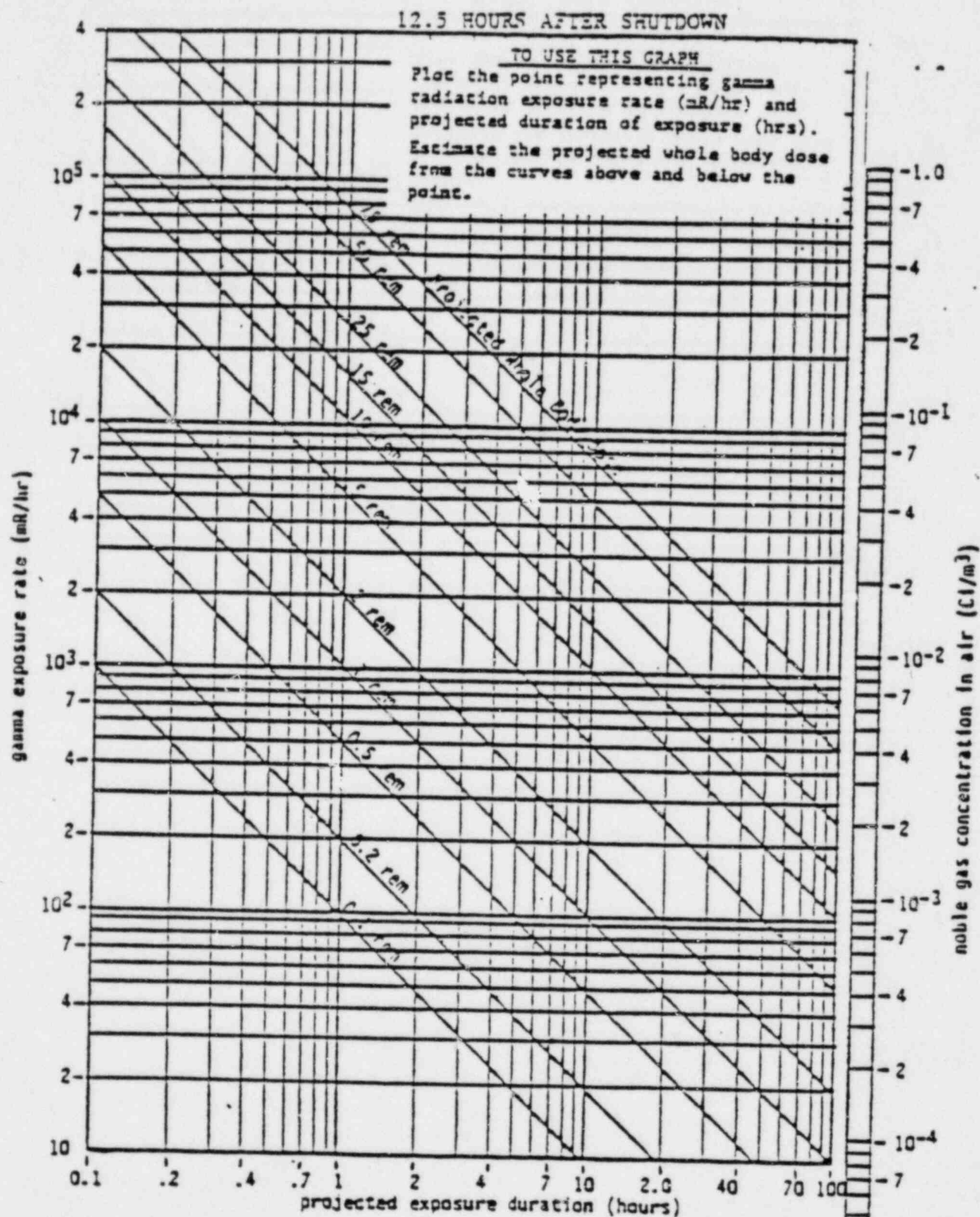


FIGURE 7 . Projected whole body gamma dose as a function of gamma exposure rate and projected duration of exposure

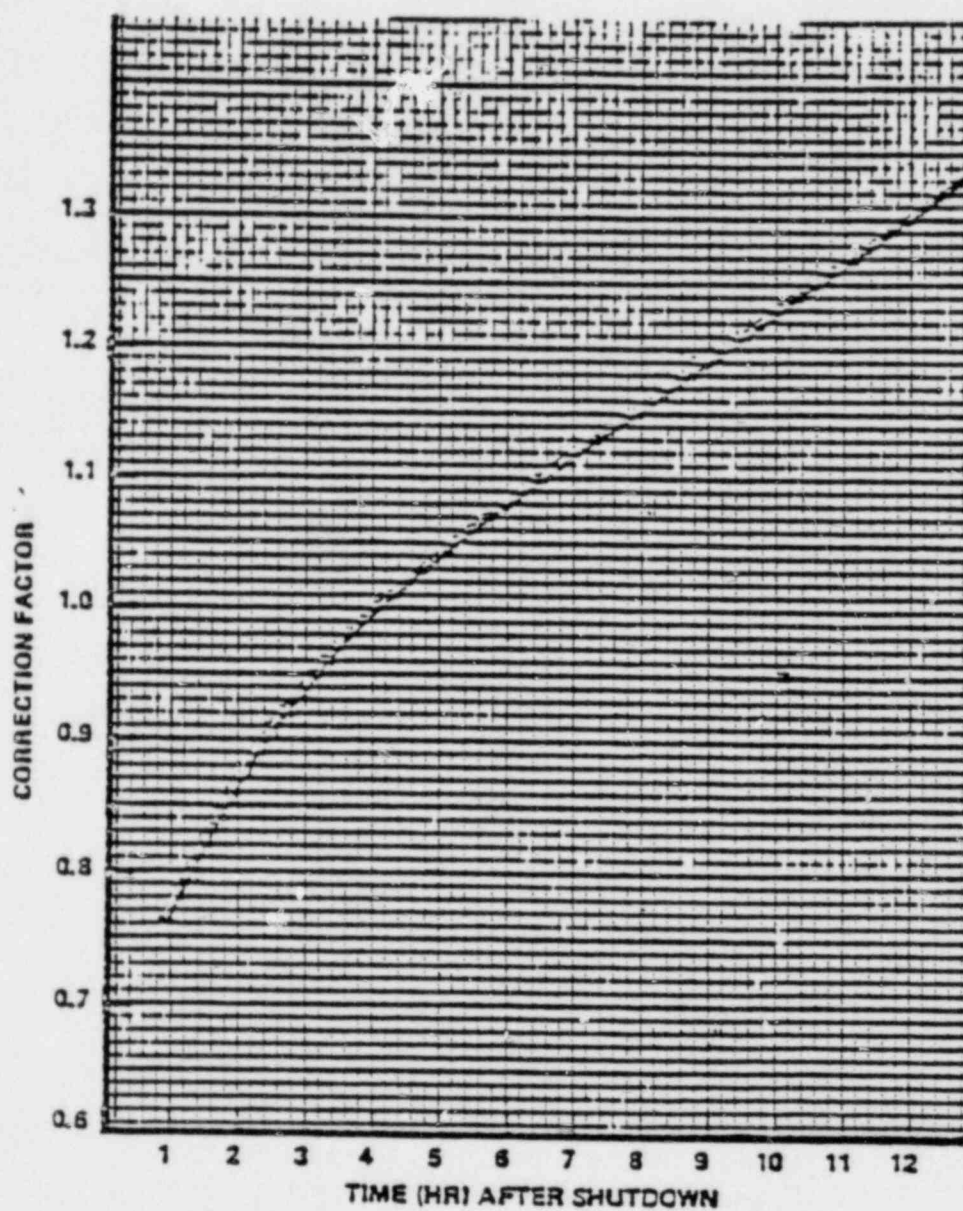


FIGURE 9 CORRECTION FACTORS FOR THYROID INHALATION DOSE AS A FUNCTION OF TIME AFTER REACTOR SHUTDOWN THAT RADIOIODINE CONCENTRATION IS MEASURED.

KEY FACILITIES LOCATED ABOUT GINNA SITE

<u>Company and Product</u>	<u>Distance from Site</u>	<u>Direction from Site</u>
Duffy-Mott Co., Inc. Williamson Baby Foods	8-1/2 mi.	Southeast
The Waterman Food Products Co. Food Processing	3-4 miles	South
Ontario Kraut Corp. 7 Railroad Ave. Food Processing	3-4 miles	South SW
Victor Preserving Co. Food Processing	3-4 miles	South
Ontario Cold Storage Food Processing	3-4 miles	South SW
Waterman Fruit Products Co. Food Processing	3-4 miles	South SW
Ontario Food Products Food Processing	3-4 miles	South SW
Lyndan Products Co. Food Processing	3-4 miles	South SW
Ontario Water District	1.1 mile	East
Williamson Water District	5 1/4 miles	East
Ontario Fire Department	4 miles	Southeast
Ontario Center Fire Department	3.5 miles	South
Union Hill Fire Department	5 miles	Southwest
Ontario Town Hall	4 miles	South

HOUSES IN AND ABOUT GINNA SITE

House on Lake Rd. directly south of plant	Beebe	1,500 ft.	South
House on S.W. corner of Lake Rd. and Ontario Center Rd.	Loomis	2,000 ft.	South SE
House on North side of Lake Rd. S.E. of Science Center access Rd.	Taillee	2,500 ft.	Southeast
House on private road north of above house		2,000 ft.	S.W.